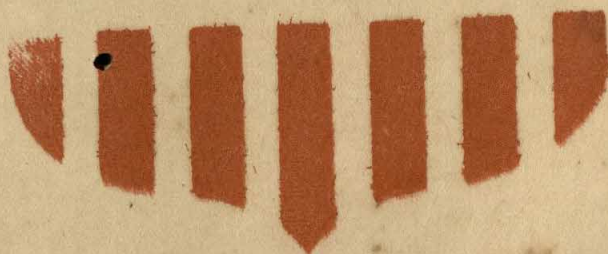


General Education

FIFTY-FIRST YEARBOOK, PART I



UNITED STATES OF AMERICA



THE FIFTY-FIRST YEARBOOK

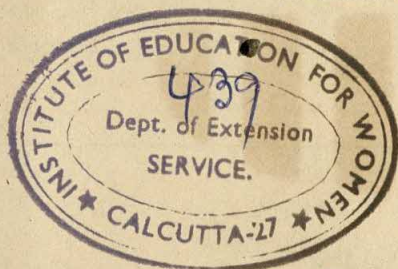
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OF EDUCATION)

PART I GENERAL EDUCATION

Prepared by the Society's Committee

STEPHEN M. COREY, CLARENCE FAUST, ROBERT J. HAVIGHURST, T. R. McCONNELL
(Chairman), EARL J. McGRATH, HAROLD TAYLOR, and JACOB VAN EK

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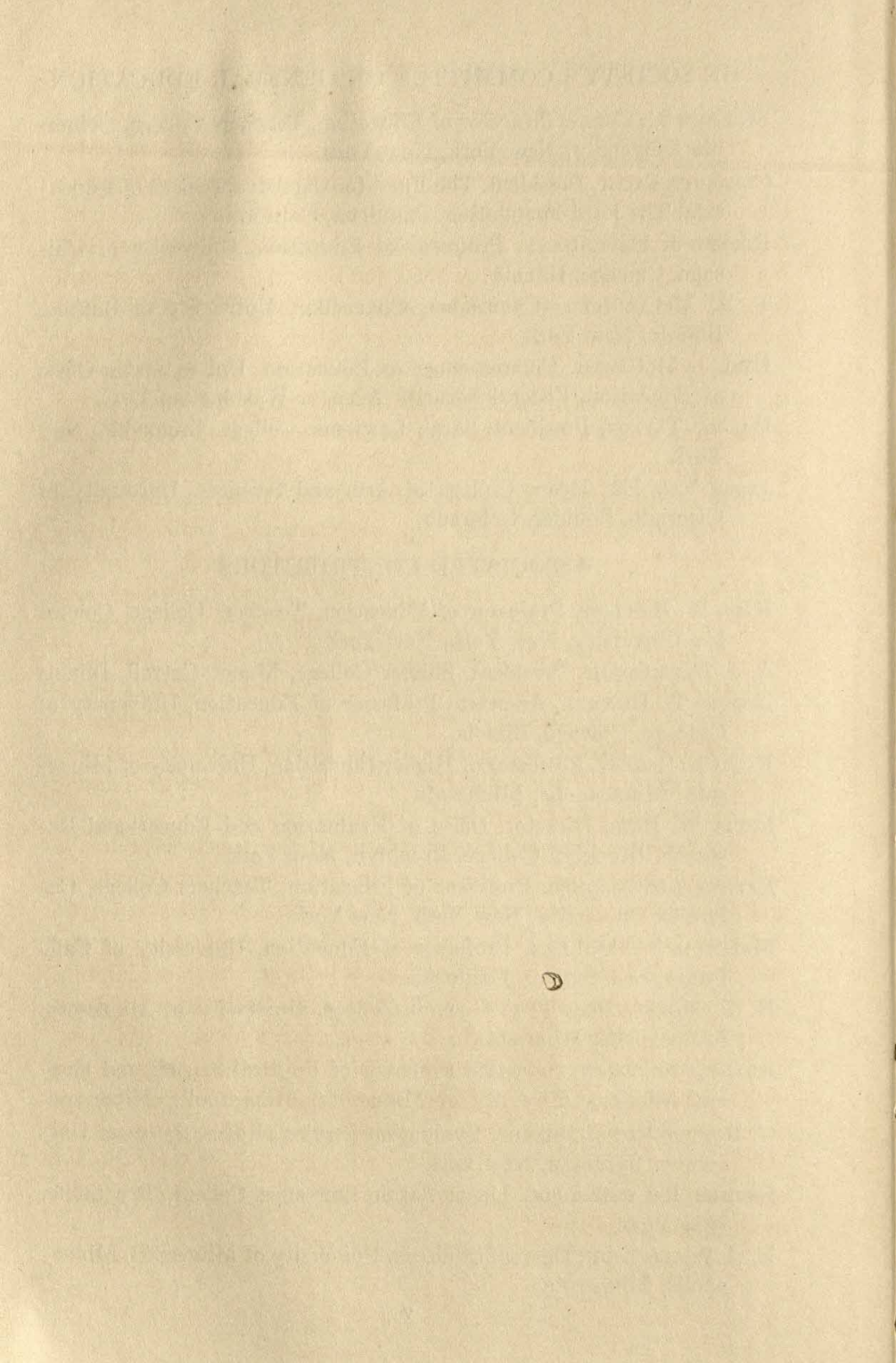
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EDITOR'S PREFACE

At the meeting of the Board of Directors in May 1948, Mr. McConnell suggested that some inquiries be initiated with reference to the desirability of a new yearbook on general education. Such inquiries were made and the results discussed at different meetings during the next two years. In May 1950, the Board approved the general form of a plan for the yearbook and requested Mr. McConnell to serve as the chairman of the committee which was then appointed.

Two earlier yearbooks of this Society have taken cognizance of the deepening concern of higher institutions over the uncertainties of the aims and the outcomes of experiments in nonspecialized programs of instruction. Part II of the Thirty-first Yearbook was the result of a study made by a committee of the American Association of University Women with the view of determining the significance of different types of reorganization of the curriculum in liberal-arts colleges. Chapter iii of this report provides a somewhat detailed summary of one hundred twenty-eight "outstanding changes and experiments" in operation at that time. The Thirty-eighth Yearbook, Part II, *General Education in the American College*, describes representative programs, the selection being made so as to afford illustrations of the different approaches to the problems of content and method in general education at the end of the 1930's, and the relation of these programs to professional education.

The present volume is a timely addition to the Society's services in relation to developmental procedures in the improvement of theory and practice in American education. The discussion is centered upon fundamental aspects of the social and intellectual needs, the interests and responsibilities of youth and the objectives and procedures of the educational programs which the higher institutions are continuously endeavoring to adapt to the requirements these youth must meet for the achievement of their goals. The yearbook is presented with confidence that the faculties of institutions which are particularly concerned with the problems here considered will find suggestions and guidance which will prove useful in the evaluation of their present programs and in the consideration of possible steps toward the attainment of new objectives.

NELSON B. HENRY

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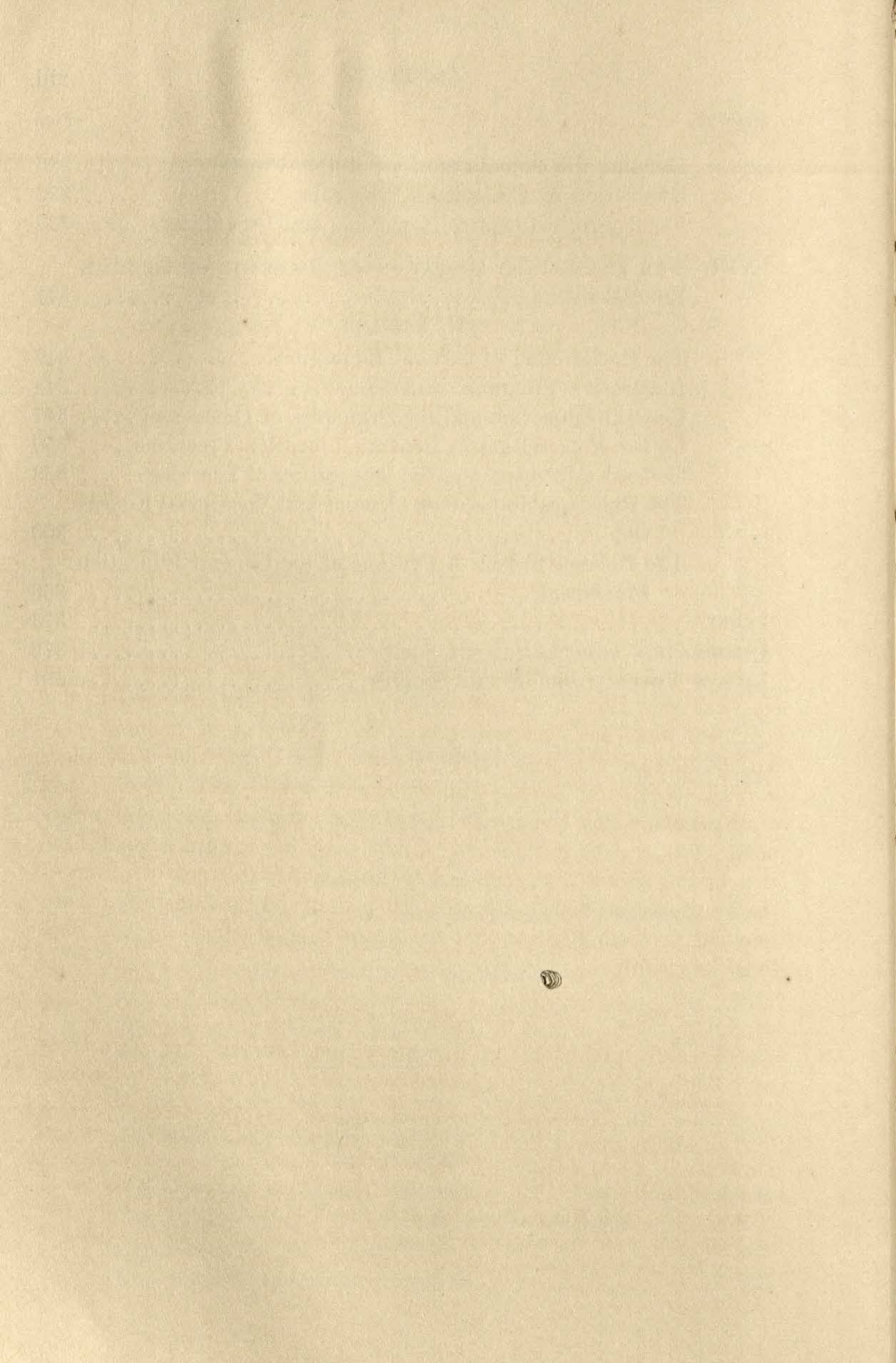
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CHAPTER I

GENERAL EDUCATION: AN ANALYSIS *

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Chancellor, University of Buffalo
Buffalo, New York

THE MEANING OF GENERAL EDUCATION

The adjective "general" has all but displaced the older "liberal" in educational discussion. Nevertheless, many members of liberal-arts faculties still object to the coinage of "general education." If the term means anything at all, they insist, it is embodied in the concept of liberal education, and the new expression is, therefore, entirely unnecessary.

No one desires to defend the invention of a new phrase if an old one will do. But the enormous amount of writing, discussion, and invention that has occurred under the designation of "general education" during the past thirty years seems to indicate that there is more to this movement — for movement it is — than a name. It is a movement which began as a re-examination of the nature and purposes of liberal education and which is leading toward a revitalization of the liberal arts, and perhaps to a complete reconsideration of the nature of the learning process. It is doubtful that this reconstruction has proceeded so far that the term "general education" has outlived its usefulness.

Background Factors

The early proponents of this movement believed that correctives were badly needed for certain tendencies in college and university edu-

* The author appreciates the permission to use in this chapter several passages from an address given at Rochester last April and soon to be published in "Man's Loyalties and the American Ideal," *Proceedings of the Second Annual Symposium* sponsored by the State University of New York. Acknowledgment is also made of the assistance of Horace T. Morse and Russell M. Cooper of the University of Minnesota, with whom various points were discussed, although the author is responsible for the points of view expressed in the chapter.

cation. General education was a reaction against overspecialization, against imbalance between the pursuit of special interests and the attainment of the broader cultivation that the liberally educated man was traditionally expected to possess. It was a reaction, too, against the fragmentation of the curriculum and the disunity in the student's educational experience that were the inevitable concomitants of the vast increase in specialized knowledge. So chaotic had the educational program become, even in the liberal-arts college, that it was almost impossible to see life steadily and to see it whole (if that be an attainable ideal under any circumstances); and with an eye always on the progressive subdivision of departments, subjects, courses, and specialized sequences, it became more and more difficult for scholars and educational officers to keep the student in mind at all, much less to see *him* steadily or see *him* whole.

With the increasing emphasis on specialization, technical matters, even in the old disciplines, began to crowd out humane considerations. Each department began to treat all students, even in elementary or introductory courses, as potential specialists, in spite of the fact that only a few of them would pursue the subject to that point. As a result, basic liberal studies became more and more technical and less and less relevant to fundamental human concerns. It was the science faculties that were most frequently charged — by the humanists — with being illiberal, but the latter in many instances themselves quite unconsciously succumbed to the evils they denounced. Professor Bush of Harvard has made the following comment on the responsibility for the decline of interest in humanistic studies among undergraduates.

Custodians of the humanities have been far from blameless. The young sheep may or may not have been hungry, but they too often have been given the husks of literary history and professional scholarship.

The spiritual vacuum left by such teaching has been promptly filled with various kinds of gas, so that the aforesaid sheep, “. . . swoln with the wind, and the mist they draw, rot inwardly, and foul contagions spread.”

Meanwhile teachers of the humanities have looked on with cynical but largely inactive contempt.¹

Thus, more than anything else, perhaps, general education was and is a reaction against formalism in liberal education. That education may lose contact with the human spirit, that it may degenerate into something perfunctory, narrow, or stilted is the warning Sir Richard Livingstone has given in the following passage:

¹ Douglas Bush, “Education but Not Educationalism,” *Key Reporter*, VII (1942), 1-2.

"Salt can lose its savour; the humanities can lose their humanity. Education continually tends to degenerate into technique, and the life tends to go out of all subjects when they become technical. . . . It is possible to read history and get a history scholarship and an honors degree in it without divining the depths that lie beneath laws and wars, diplomacy and institutions, or hearing behind the tumult and the shouting the still sad music of humanity: indeed that music is inaudible in most history books, though always present in the great ones. So easily can education decline into routine and mechanism. . . . Knowledge may become an end in itself, irrespective of whether it is worth knowing. The scholar is seduced by his technique."²

Liberal studies — in the humanities and the sciences alike — easily fall prey to all sorts of pedantries unless teachers strive earnestly to make them relevant to human needs and values, to bring them to bear on students' own problems and the crucial issues of their age. There is need today for another educational renaissance. This is suggested, at least, by many experiences with students, of which the following episode is a typical example:

A student in a class which had just been admonished to study philosophy asked, "If philosophy is such an important liberal study, can you tell me why it is that our courses in philosophy never seem to have anything to do with things that matter to *us*?"

That is the kind of question that general education seeks to answer.

Whether all of them believe in the philosophy of John Dewey or not, most people will agree that Dewey has indicated the form that the answer should take. Speaking of the role that philosophy should play in the understanding and management of human affairs, he urged that this subject be transformed from "a device for dealing with problems of philosophy" into "a method, cultivated by philosophers, for dealing with the problems of men." This, it seems to me, epitomizes the spirit and purpose of general — and truly liberal — education, to make learning, in the words of President Seymour of Yale, "functional and living in our time."

Definitions of General Education

Lest the concept of general education still be left in vague form, however, definition is here in order. Fortunately, there is increasing agreement, though by no means universal consensus as yet, on what

²R. W. Livingstone, *Some Thoughts on University Education*, pp. 16, 18. Fifth Annual Lecture of the National Book League, October 29, 1947. Cambridge, England: University Press, 1947.

general education is. Typical of recent definitions are the following:

Its function is to prepare young people . . . to deal not with the special problems parceled out in our society to the members of the various occupations and professions—to the chemist and the carpenter, the architect and the accountant, the merchant and the housewife—but with the problems which confront all members of our society alike, such problems as our domestic and foreign policies, our political leadership, our individual relations with the physical universe, our personal philosophies. General education appears from this point of view to be the preparation of youth to deal with the personal and social problems with which all men in a democratic society are confronted.³

General education . . . is that which prepares the young for the common life of their time and their kind. . . . It is the unifying element of a culture. It prepares the student for a full and satisfying life as a member of a family, as a worker, as a citizen—an integrated and purposeful human being. It does not overlook differences in talent, interest, and purpose; nor does it attempt to form everyone in a single mental and spiritual mold. Seeking to make possible the maximum development of the individual consistent with the general good, it encourages respect for inventive genius and tolerance for variations in opinion, while at the same time it rests on the principle that deviations in thought or in act must be based on understanding rather than ignorance of the purposes, values, and standards of society.⁴

Differences in Interpretation

While statements of the meaning and broad function of general education tend to move in the direction of these two definitions, wide disagreement appears when the ends are stated in greater detail and the means are specifically decided upon. Some programs are based on the assumption that the broad purpose of general education can be most effectively attained by concentrating on intellectual processes. Others place emphasis on the concurrent development of all phases of the individual's personality—intellectual, social, physical, and emotional. Certain programs place principal reliance on study of the cultural inheritance, in the belief that the best way to meet present problems is to understand how comparable ones have been treated in the past. Others organize students' learning around present-day problems, not neglecting the past but using it as a means of interpre-

³ Clarence H. Faust, "The Problem of General Education," in *The Idea and Practice of General Education: An Account of the College of the University of Chicago*, p. 6. By Present and Former Members of the Faculty. Chicago: University of Chicago Press, 1950.

⁴ Earl J. McGrath, et al., *Toward General Education*, pp. 8-9. New York: Macmillan Co., 1948.

ting contemporary issues in accord, for example, with Hook's statement that "... general education must make one of its central functions the critical study of the basic cultural phenomena of *our* time."

Perhaps the majority of writers and institutions emphasize verbal sources of understanding almost exclusively: "... We cannot escape the fact that the most important decisions men have to make regarding society must be made, not on the basis of direct experience, but on the basis of verbal and written reports and arguments" (Faust). Some authors and programs, on the other hand, place greater confidence in the educative value of actual participation by students in the life of their time, on and off the campus: "There is no substitute for the direct experience of the human being with the actual object of his thought. . . . Education, or knowledge-getting, is a process in which the student involves himself. Otherwise, it is simply a name for organized information" (Taylor).

To some exponents of general education, the purposes are to be attained by transmitting to each new generation of students the tested ideas and values of its cultural inheritance. To others, they are to be realized by making learning the "creative agent of cultural and social progress." To some, the process of general education is the inculcation of some accepted set of values and interpretations of individual and social experience. To the more venturesome, it is the process of encouraging students to discover for themselves the ideas and ideals which seem to hold the greatest promise for human beings and for society.

Assumptions concerning human nature, the process of human development and change, the way in which learning takes place, and the extent and method of transfer vary greatly, and decisions concerning curriculum organization and instructional procedures diversify correspondingly. Frequently the literature on general education and also the practice of general education disregard the available research on these matters; in relatively few instances are principles and procedures of general education based on studies of students and data concerning human behavior.

Now and then, the attempt in theories and programs of general education seems to be to induce a high degree of uniformity in knowledge, in values, and in social behavior. In other instances, the emphasis, while on the quality of social experience, is at the same time on the encouragement of individuality: "What we call *independence* of personality is one of the most reliable signs of this quality of distinctive inwardness. One of the tasks of general education should be

to strengthen the sense of its significance which our culture seems to be losing" (Hook).

Whether general education should take responsibility for what human beings *do* or only for what they *understand* is another of the issues about which conceptions and practices diverge. President Conant states that he would amend the Harvard report on *General Education in a Free Society* ". . . by stressing the type of *behavior* on which a free society depends rather than emphasizing the common knowledge and common values which influence the behavior of citizens." In a later chapter of this yearbook (chap. vi), however, Naftalin takes the position that the social scientist in general education should not conceive of his objectives in terms of social *action*; he should limit his responsibility to how the student *thinks* in approaching the matters with which the social sciences are concerned. Williamson, on the other hand, takes the other position (chap. xi); he conceives of the extracurriculum as experiences which give the students the opportunity to work out in practice the principles learned in their courses. In this difference of view lies one of the deepest issues in the philosophy of general education.

Although there are many differences in interpretation and practice, some of which have been summarized above, programs of general education almost invariably attempt in some fashion to restore relevance and coherence to the student's educational experience. Somehow, it is agreed, learning should be relevant to human needs, or more specifically, to students' needs (however they may be conceived or discovered) and to the necessities of the time (whether they be considered to some degree novel or merely a continuation of the past). And general education nearly always represents an effort to substitute a new unity for the scattered fragments of knowledge into which the curriculum has disintegrated.

"The passion for unity seems to be inveterate, universal, and endemic," Kallen wrote recently.⁵ He was discussing the problem of unity among the sciences, and he was warning against the construction of fixed systems. He questioned the use of the term "integration"—which occurs repeatedly in the literature on general education, ". . . with its implication of numerical wholeness, of seamless, static totality without fissure, without movement, without conflict" (p. 241).

⁵ H. M. Kallen, "The Meanings of Unity among the Sciences," in *Structure, Method, and Meaning*, p. 225. Essays in honor of Henry M. Sheffer. Edited by Paul Henle, Horace M. Kallen, and Susanne K. Langer. New York: Liberal Arts Press, 1951.

It seems appropriate, then, to ask: What degree of unity or what kind of relatedness should characterize general education? What is the significance of "integration" in general education?

There are various senses in which the term "integration" is used in discussing problems of higher education. Many of these meanings are explored in the final chapter of this yearbook, and, therefore, only a few of the connotations will be discussed here.

THE PROBLEM OF INTEGRATION

Perhaps the most frequent way in which the term "integration" is used is in the sense of "integrated education." Thus, there has been an attempt to determine the degree to which particular disciplines, such as physics or economics, can be brought together into a more inclusive and unified system through pervasive ideas, principles, or methodologies. Faust, in characterizing the divisional courses in the College of the University of Chicago, declared that "... it is possible to construct general courses which are not accumulations of selected conclusions from various departmental fields or vaguely general formulations of widely general problems but are exact, penetrating treatments of the basic principles of such an area as the social sciences or the humanities." But there is still the problem of organizing the several *fields* of knowledge if the curriculum is to be fully integrated. At Chicago, this task falls mainly to a course entitled "Observation, Interpretation, and Integration" designed "to equip the student with the knowledge and intellectual disciplines necessary for a theoretically and practically meaningful integration of the different fields of knowledge which are the main subject matter of the other general courses."

Although no such all-integrating course seems to be offered in the General College at Boston University, the catalog dated January 29, 1948, nonetheless stated that,

The primary distinction of the General College program derives from the "total integration" of its program of study, in contrast to these instances of "partial integration." ["Partial integration" is used to characterize divisional courses.] The aim, is to unify our courses of instruction so that they constitute, in effect, one single course in which the material drawn from *all fields* is synchronized and correlated at every feasible point to emphasize significant relationships and to promote meaningful generalizations, consistent knowledgeable attitudes, and critical appreciation.

Means and Kinds of Integration

Integration is often effected by some a priori principle or principles, creed or philosophy, theme or framework. Discussing the ques-

tion of how a program of general education might be "tied together," Kerwin recently analyzed the problem as follows:

Here two schools came into conflict; the one feared the imposition of a point of view; the other feared a plan that would produce a sophisticated eclecticism with much knowledge and little wisdom. In a situation of this kind, church-affiliated institutions have the advantage of proceeding to tie things together on the basis of creed or philosophy. At the present time at the University of Chicago the tying-together function is handled through an orientation and integration course. I believe it can safely be said that most of the people that have been involved in one way or another in the general-education program feel that some basic course or other is necessary — at the beginning or the conclusion of the whole program. It may be the philosophy of Plato, Aristotle, Aquinas, Descartes, Kant, Hegel, Hume, or James, but some rule that other things are judged by — some springboard one leaps from — has to be provided. Nor does this involve with the skilful teacher a jamming of certain doctrines down the unwilling or unwitting student's throat. It assumes that both teacher and student are rational beings and that basic principles must be arrived at — painfully, perhaps, but necessarily — through step-by-step processes of reason and logic.⁶

This paragraph bristles with controversial educational issues, many of which will be discussed in later chapters of this volume. The following will serve here as examples: Is it justifiable to impose any particular set of "rules that other things are judged by," or should the student himself be encouraged to discover relations and formulate standards of judgment? Are ideas by which particulars may be ordered and understood to be taken to an educational experience or discovered *in it*? Granted that generalizations should be arrived at, at least tentatively, what is the nature of "basic principles"? Are they "first principles" or "eternal verities," or are they subject to revision with changes in individual and social experience? Are reason and logic the only processes by which order can be approached? Is an organization which is appropriate and fundamental to one purpose equally relevant to another? Is the end in view a neat structure of ideas and values which can be perpetuated, or is it the constant reorganization of experience in ever more meaningful ways?

The Dangers of Standardization

It has often been said that the purposes of general education should be attained by giving students a common core of knowledge and

⁶J. G. Kerwin, "General Education: Getting the Program Started in a Large University," An address delivered at the Sixth Annual National Conference on Higher Education held in Chicago, April 2, 1951. Washington: Department of Higher Education, National Education Association, 1951 (mimeographed).

ideals. This might be accomplished by having them take the same courses, or by having them read the same books. (Incidentally, using the "great books" as the basis of integration presents certain difficulties; some choice of ideas becomes essential, since these documents do not always speak in concert about human nature and experience or about fundamental principles.) The opponents of a common curriculum take the position that to the degree that the outcome is a standardized view of our cultural heritage, it seems to be incompatible with the fundamental processes by which solutions and agreements are reached in a democratic society. Also, a common curriculum seems to them to be inconsistent with what is known about individual variations in interests, motives, aptitudes, abilities, and the processes of development and learning. The late Dean J. B. Johnston of the University of Minnesota, who twenty years ago wrote one of the most perceptive and prophetic volumes on the individual student and his general and specialized education, considered and rejected the idea of a "single ideal curriculum." Among a hundred students, he insisted, there will be a hundred different personalities requiring particularized treatment. "Looked at in this way," he wrote, "it is as vain and futile for the college to require all its students to take the same courses of study as it was in the earlier day for medicine to attempt to apply one remedy to all conditions of disease. Common prescription of studies for all students is a remnant of the imposition of institutional tradition."⁷ Dean Johnston believed that it is as necessary to individualize a student's general education as to tailor-make his specialized curriculum. "If we could give full regard to the different types and attitudes among students," he said, "we would allow them to approach the world riddle from different directions."

How Much Unity?

It is appropriate to ask, too, what degree or what kind of unity is requisite in a democracy and consistent with its spirit. A "common life" may turn out to be an undemocratic one. Men of goodwill, men with a strong sense of moral and spiritual values, men with unswerving democratic loyalties may be counted on to share the same purposes to a very great degree. But this is the kind of commonality that leaves room for wide differences in point of view, that attains unity not in spite of but through diversity, that assures freedom of discussion, criticism, dissent, and positive affirmation in deciding upon

⁷ John B. Johnston, *The Liberal College in Changing Society*, p. 42. New York: Century Co., 1934.

ends and in selecting or devising means. This may have been what President Conant had in mind when he said that in planning for general education in a democracy, we should be content with a few basic propositions concerning the way we want our present students to behave as adults. In a recent discussion of this problem I have suggested what some of these propositions might be:

Only in the broad and generalized sense . . . do we wish uniformity in point of view. What we do want is a people devoted to the conditions of freedom, men and women with a high sense of social obligation, citizens who bring to bear on the analysis and solution of their personal, social, economic, and political problems a fund of relevant and decisive information and disciplined methods of critical, constructive, and scientific thinking. The advancement of our way of life depends upon the orchestration of a wide range of talent and achievement and the application of the intelligence of free men to the solution of the problems which define the crisis of our age.⁸

This point of view may be quite unacceptable to many persons in the field of general education. The differences in position are related to basic philosophical, sociological, and psychological considerations, some of which are defined and discussed in chapters ii, iii, and iv.

Integration and the Student

The foregoing discussion has been concerned predominantly with integration of subject matter, knowledge, or values. Because those who have been working at programs of general education are so pre-occupied with problems of *content*, it has been almost habitual to think of general education as equivalent to a certain set of courses (particularly divisional courses), whether required or not. But a moment's consideration casts doubt on this conventional point of view; one realizes that the course one student takes for specialized purposes another may take as a part of his general education. After reflection, one may conclude that general education should be thought of in terms of outcomes rather than in terms of courses, and that perhaps the Harvard Committee was wise when it stated that general education is to be conceived more in terms of method and outlook than in terms of content. Yet Harvard does resort to courses devised especially for general education; in fact it has recently adopted a required program. Some theorists insist that, in planning general education, it is necessary, first, to determine purposes and, then, to select content or learning experiences in terms of them. The extreme

⁸ "Fundamental Decisions in Developing a Program of General Education," *Educational Record*, XXIX (April, 1948), 123-36.

neo-humanists, on the other hand, would seem to start with content and then plan on how to make it significant to students. In any event, the basic problems of general education have to do with the ends to be attained and economical means of achieving these objectives for *individual students*.

Whenever one ponders the problem of integration, he would do well to remember that beyond academic disciplines or organizations of content there is the student — his needs and the problems of living he will meet. That the *student* should integrate his formal and informal educational experiences in terms of *his* purposes is the contention of the instrumentalist as explained by Taylor in chapter ii. And it is the position taken by Corey in chapter iii, where he says that “. . . in the last analysis it is the way the learner organizes his own experience that counts rather than the organization imposed by other people upon the subject matter the student learns.”

RELATION OF GENERAL AND LIBERAL EDUCATION

Sharp — and what sometimes seem to critics arbitrary — distinctions are often made between general and liberal education. It is said, for example, that liberal education is concerned first with a body of subject matter, drawn mainly from the cultural heritage of the western world, while general education is concerned first with the learner as a human being. In another form this distinction is expressed as an emphasis on “content” versus a stress on the learner’s adjustment to the conditions of life. The organization of the curriculum in liberal education would, consequently, be logical, following the systematic lines of fields of knowledge; the curriculum in general education, on the other hand, would presumably be organized around the needs, interests, or activities of individuals, or around the problems of modern life. This distinction is very much the same as that between two views of general education (see p. 3f.), and therefore does not serve very well to differentiate liberal from general education. As subsequent chapters will show, some programs of general education are based on the structure of fields of knowledge, while others are “student” centered or “life” centered. Many programs actually partake of both forms of organization.

Again, it is said that liberal education is concerned mainly with intellectual development, with submission of all other phases of personality to reason, while general education takes as its responsibility the development of the individual on a broader scale — emotional, social, and moral, as well as intellectual — and in an integrated way.

But not a few defenders of liberal education will rise to say that the true liberal ideal is that of the well-rounded and balanced person, and that the intellect is not to be cultivated at the expense of creative abilities or of constructive emotional experience. Here, too, the distinction seems to divide on different programs of general education rather than to set off general from liberal education.

A third distinction sometimes made is that liberal education puts a premium on contemplation, in contrast with the emphasis of general education on action. But reference to earlier sections of this chapter will show that programs of general education divide on the same issue, although it is probably true that the literature in general education does put more stress than in liberal education on how a man acts or lives. Perhaps the real distinction is one of method. As pointed out previously, many exponents of liberal education seem to assume that thought inevitably carries over into appropriate action. This is a doubtful psychological assumption and one that the literature on general education has challenged.

Another presumed difference between general and liberal education is that the former has restored order to the curriculum, while the latter has sacrificed integration and relatedness to the progressive differentiation of knowledge. But this distinction may be more relevant to the recent state of affairs in liberal colleges than to the traditional concern with broad fields of study before the extensive subdivision of those fields which occurred with the vast expansion of knowledge. The trend in the liberal arts seems to have been from liberalizing to specializing features; general education has attempted to reverse the direction.

With the development of specialization, liberal education has attempted to encompass both spread in the student's studies and depth in a particular subject or field. The literature on general education slights depth, but it is not incompatible with it. One of the common purposes of general education is to provide a broader and more meaningful context for specialization.

Whatever the validity of the distinctions considered above, general education is opposed, as it has been conceived and developed in most instances, to the aristocratic view that liberal education should be either the special privilege of a leisure class, the exclusive possession of an intellectual elite, or the distinguishing hallmark of those who practice certain professions instead of engaging in occupations which carry lesser social prestige. It has been asserted that the values of a liberal education, particularly in such fields as literature, history,

philosophy, and the fine arts, can be attained only by protracted study, and that little is to be gained by trying to extend their benefits to a great body of students, many of whom may have a limited time for unspecialized or preprofessional work. There are those, however, who vigorously assert that there is no aristocratic bias in liberal education. Programs of general education, in any event, are an attempt to offer the advantages of study of the liberal arts, on a minimum basis at least, to all students whatever their special interests or the character of their professional training. As a matter of fact, general education is often made available, either for a shorter or longer period of formal study, to students who probably will not follow any specialized curriculum at all. Furthermore, many programs of general education are devised in whole or in part for students whose intellectual capacity may be too meager to justify either admission to advanced levels of liberal study or to a professional curriculum.

Perhaps it is fair to conclude that if liberal education is broadly conceived in terms of its relevance to human living in our time, the difference between liberal and general education is recognized as mainly one of degree. Ideally, it would be desirable for all students to have a "fuller" liberal education, but those for whom this is impossible should enjoy the opportunity for a more limited education, expressly designed for individual development and civic responsibility.

While differing in degree, general education and a truly liberal education thus have a common spirit and purpose. In a reference to the general-education program at Columbia University, Carman explained the purposes of that program as follows:

Through the years we have come increasingly to believe that the principal job of Columbia College is to liberate the mind from ignorance, fear, prejudice, and superstition to the end that Columbia men may carry on as effective citizens in a democracy. We want citizens with broad perspective, a critical and constructive approach to life, with standards of value by which they can live nobly. We want them to have a deep sense of responsibility for their fellows and to be persons of integrity easily motivated to action in the cause of freedom and goodwill. We want them to have ability to think, to communicate, to make intelligent and wise judgments, and to evaluate moral situations, and to be able to work effectively to good ends with others.⁹

These should be the purposes of liberal education; as the aims of general education, likewise, they should be attained as fully as the circumstances of the student's education will allow. "I take it we all

⁹ Harry J. Carman, "A Critical Analysis of the Social Sciences in General Education," in *Proceedings of the Conference on General Education at Florida State University*, November 21-23, 1950.

agree," observes Sidney Hook, "that general education, if it is worth giving, is *also*, liberal education."¹⁰

THE PURPOSE OF THE YEARBOOK

Such considerations as those discussed above often do not enter into faculty discussion and program-making in general education. As Dean Carman has observed, institutions have "rushed madly forward to climb on the bandwagon of general education" without taking the time and effort to think through the fundamental issues and problems involved. The purpose of this yearbook is to stimulate faculties to define basic considerations, to make the necessary investigations, and to arrive at decisions with clear realization of their implications for all aspects of the educational process.

The aim of the yearbook, therefore, is analytical rather than descriptive. It is intended to explore fundamental issues, principles, and problems rather than to summarize institutional programs or outline courses that have been devised especially for general education. Descriptions of these programs and courses have appeared in many articles and books in recent years, and these sources are readily available. Analytical treatments, however, are not so numerous, and frequently the descriptive accounts do not relate practice to underlying questions and alternatives. The purpose of the yearbook committee was probably too ambitious, but if the chapters that follow encourage basic thinking, the project will have been justified.

The Foundations of General Education

The basic rationale for general education is to be found in philosophy, psychology, and sociology. The philosophical and sociological foundations are somewhat different from the psychological. The first two involve value problems primarily. It is true that educational objectives and processes are inevitably conditioned by social forces and that determinable social trends constitute some of the factual data that may be used, together with other factors, in making decisions about the purposes and content of education. But educational aims and procedures will also be determined by the social values that we decide to inculcate or which we accept as the goals of associated living. These values may reflect the social milieu faithfully; they may be accepted implicitly or on the basis of sociological fact-finding. Or,

¹⁰ Sidney Hook, "General Education: Its Nature and Purposes," in *General Education in Transition*, pp. 68-82. Edited by H. T. Morse. Minneapolis: University of Minnesota Press, 1951.

in varying degrees they may presage departures from the *status quo*, thus serving as ideal representations of a different and presumably better society.

Philosophy, even more than sociology, represents (but again not exclusively) a system of values; "the philosophy of an age, a culture, or a civilization consists of a set of general ideas about the ends of human life and the principles of nature" (Taylor, chap. ii). General education will be implicitly or explicitly conditioned by these general ideas or the lack of them.

The psychological foundations of education, in contrast to philosophical and sociological bases, are presumably grounded in scientific knowledge of human development and behavior. Therefore, the psychology of general education is concerned more with means than with ends. Yet knowledge of the human organism and how it changes should also influence conceptions of educational aims and values. The nature of interests, aptitudes, and abilities, their distribution among and within individuals, the way in which human beings learn and the manner and extent of their ability to transfer their learning from one situation to another—these and other factors related to educability should influence educational purposes as well as educational methods.

Chapters ii-iv of the yearbook are devoted to an exploration of the philosophical, psychological, and sociological approaches to general education. To avoid independent treatment of these interrelated foundations as far as possible, the authors of these three chapters together outlined their manuscripts and later interchanged and reviewed them. First drafts of these chapters were then made available to the other authors as they prepared their manuscripts. As a means of giving as much coherence as possible to the volume, the writers of subsequent chapters were asked to base their discussion as far as feasible on the issues outlined in the three foundation chapters. There was no desire to impose this scheme of organization rigidly, however, and so the authors were not asked to accept the generalizations of chapters ii-iv unless they wished to do so, and they were encouraged to go beyond them, if necessary, for a full and adequate analysis of their own topics.

Subject-Matter-Centered vs. Student-Centered Programs

Chapters v, vi and vii discuss the role of the humanities, the social sciences, and the natural sciences, respectively, in general education. These chapters reflect the dominant practice of organizing programs of general education around fields of knowledge. Chapter viii, on the

other hand, takes the position that the point of departure and the center of organization should not be the subject matter (however well integrated) but the student. The thesis of this chapter is that "the nature of a particular group of students, the qualities of individuals, and the need of society for individuals trained in common understanding and enlightened behavior must be considered when plans are made for their education."

Some readers may ask whether these two approaches need be so antithetical as chapter viii contends; whether both the internal structure of fields of knowledge and the relationships of its substance and methodology to individual and social needs cannot be compatibly determining in educational planning. In any event, as Morse points out in the final chapter, it is common to find both forms of course organization in many programs of general education. For example, the General College of the University of Minnesota offers courses in "Human Biology" and "The Growth of American Democracy" alongside those in "Home Life Orientation" and "Vocational Orientation." Many courses included in the Sarah Lawrence program seem to correspond to departmental courses offered in many other institutions. And President Taylor observes that some of the general-education offerings at Harvard look much like certain other courses at Sarah Lawrence.

Instructional Problems

The extent to which the objectives of general education are realized in student behavior is a function not only of the organization of courses and curriculums, but also of how teachers teach and how students learn. The fundamental principles of learning, so far as psychologists now know them, are summarized in chapter iii. Their more explicit bearing on some of the major instructional problems in general education is discussed in chapter ix.

Personnel Work and the Extracurriculum

The importance attached to student personnel work and to extra-classroom activities as means of general education varies considerably from one writer or one institution to another. If the purpose of general education is thought to be mastery of a prearranged curriculum, the function of student personnel work would seem to be limited to such things as admitting students who possess the necessary intellectual aptitude and ability, or of aiding students to keep their heads above water as they proceed through the educational program. On the other

hand, personnel services will play quite a different role if the curriculum is to be adapted to the individual student, as they will if one of the principal aims of general education is to enable the individual to understand himself and to attain a satisfactory personal and social adjustment. These problems are discussed in chapter x.

The extracurriculum could be a source both of cultural enrichment and of constructive experience in social relations. Yet, as Williamson points out in chapter xi, its educative effect may actually run counter to desirable forms of social behavior, and seldom are the possibilities of campus life fully exploited or fruitfully correlated with the more formal means of general and liberal education. Dean Williamson's chapter is a much-needed analysis of this problem.

Evaluation

A significant aspect of the problem of evaluation of programs of general education is indicated by a recent pronouncement of the United States Commissioner of Education.

To a very large degree these developments known as general education have proceeded on the basis of a priori reasoning with very little more than opinion to back up the assumptions on which they rest. With a few striking exceptions, little attempt has been made to determine experimentally whether one arrangement of subject matter, or one method of teaching, is better than another, or better than more conventional forms and practices.¹¹

This raises the fundamental question of evaluation both of short-term and long-term outcomes of general education. In chapter xii Eckert analyses the problems and procedures involved in attempts to answer the following questions about general education: "Do these programs achieve the objectives that have been set for them? Are these objectives the proper ones or might the ends themselves have been conceived differently?"

Administrative Organization

Administrative organization is a means, not an end. If general education is to be strictly divorced from vocational education or specialization, one kind of administrative structure may be indicated. If general and specialized education are to proceed together, and perhaps interdependently, another kind may be required. If the student is to conform to a "standard" curriculum, certain administrative

¹¹ Earl J. McGrath, "The Need for Experimentation and Research, in *General Education in Transition*, chap. ii. Edited by H. T. Morse. Minneapolis: University of Minnesota Press, 1951.

forms and procedures may be satisfactory. If the curriculum is to conform to the student, quite different ones may be necessary. The problems of organization and administration may differ in two-year and four-year colleges. Administrative organization will depend also on whether departmental, interdivisional, or divisional courses, or some combination of these types, are offered. These and other aspects of administrative organization for general education are analyzed in chapter xiii.

The Teacher

The best-laid plans for general education are likely to go awry if teachers are unsympathetic with the purposes and the program, or if their educational interests and backgrounds unfit them for the kind of teaching which general education requires even if they believe in its values. How "both the character and quality of any program of general education will largely reflect the purposes of those who teach in it, and their skill in achieving those purposes," is discussed by Bigelow in chapter xiv. He considers also the deficiencies of preparation for teaching in programs of general education and suggests changes that might be made in teacher education to secure better-fitted teaching personnel.

Developing the Program

It is true that most college and university teachers have been educated, selected, and appointed as specialists. It is also true that while it is increasingly possible to secure staff especially trained for participation in general education, most institutions will have to rely on these same specialists in planning and conducting the program. How to stimulate their interest in such a program, their active participation in deciding questions of ends and means, and their wholehearted co-operation in counseling and teaching, are problems which are discussed in chapter xv.

The Program as a Whole

Most of this yearbook has been devoted to an analysis of basic educational questions and issues drawn mainly from theoretical writings rather than institutional practices. How are these considerations reflected in actual programs of general education? When one looks at institutional practices, can he find clear-cut examples of the rationalist, neo-humanist, and instrumentalist points of view or is he likely to discover that most programs reflect varied points of view and there-

fore are inconsistent within themselves? And the reader may ask how defensible it would be to adopt one of the three philosophical positions outlined in chapter ii, select only faculty members who accept this position, and build an educational program which faithfully reflects it.

Whatever the answers to such questions as these, there are common problems in over-all planning for general education. How shall general education at the college level be articulated with that in the secondary school? Are courses devised especially for the purposes of general education adequate foundations for specialized study? Shall general education be separated sharply in sequence, administrative organization, and spirit from vocational and professional education?

These questions are reviewed in the final chapter of the yearbook, which offers, as well, a brief critique of the general-education movement.

CHAPTER II

THE PHILOSOPHICAL FOUNDATIONS OF GENERAL EDUCATION

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THE PHILOSOPHY OF EDUCATION

Philosophy, education, and society are so closely interrelated that to discuss one without reference to the other is to isolate one segment of reality from the other realities which give it meaning. In one sense, society is the whole of education since, within a given society, each mode of human experience acts upon the individual in an educative way, and our social institutions, whether institutions of education or of any other kind, are simply the means we take to structure the experience of the individual in ways appropriate to the aims of our society. The individual is educated by the way he spends his time and by the situations into which he is put, or into which he accidentally falls. Education is the name we reserve to designate the formal means a society takes to submit its members to a common set of intellectual and social experiences. The educational system thus becomes a mirror in which are reflected the political, economic, psychological, social, and moral forces at work in the society in which the system exists. But since society can thus perceive its own image and can modify that image by reform within the educational system, it has here an instrument of social transition.

On the other hand, philosophy is a name for the process by which the aims of society can be made clear to itself and standards of truth and values can be established as logically tenable; as Helen Lynd says, ". . . philosophy embodies the recurrent thrust of life against custom." Those who exercise power in government, business, industry, or labor are not philosophers, nor is their concern the analysis of values or the inquiry into meaning. Yet a philosophy is implicit in their

actions, since any pattern of human behavior, in order to be successful, must maintain a high degree of consistency. The consistency may be consciously or unconsciously held, yet in either case it makes up a pattern of behavior or philosophy, by which decisions as to action may be made and by which acts may be judged as good or bad, wise or unwise, both by the person who acts and by those who observe and evaluate his actions. Philosophy, considered as an activity rather than as a system of ideas, is the kind of intellectual activity which attempts to hold before the individual and the public mind an inquiry into the principles by which we can judge the true from the false, the good from the bad, the valuable from the useless, or, to put it broadly, which seeks to discover the ends of human life.

The philosophy of an age, a culture, or a civilization consists of a set of general ideas about the ends of human life and the principles of nature to which most people give tacit or spoken assent and upon which the intellectual content of the educational system rests. A good deal of the time, these ideas are not analyzed or understood but are merely acted upon as a kind of social adaptation common to the age in which the ideas are found. Yet the philosophy of each age or period of history does change, not because it is ever successfully refuted by philosophers, but because a new set of ideas, more appropriate to the shift in social and personal needs of a changed society, is suggested by those who think, speak, and write about these matters. These shifts in basic patterns of ideas occur whenever there is an opportunity within a society for new ideas to assert themselves and for people who observe the events of their time freshly, free from intellectual inhibitions and social restraints, to express their attitudes and beliefs, both by way of thought and by way of action. Therefore, the processes of an open society, as revealed in the values implicit in its educational system, merge with the processes of thought expressed in philosophies, and philosophy and education become the means by which a society becomes aware of itself and its tendencies. The philosophy of education is that extension of philosophy into practice which has to do with sustaining a set of values within the society. It is also responsible for lending guidance to those whose task it is to make schools and colleges. This is of course not true in the same way when we are dealing with a closed society. In this case, the controlling agencies of the educational system, like the agencies of the police system, or the army, or the political party, are simply the means by which the men in authority control the actions of the people, in school and out of school. The philosophy of education in such a society is then an extension of

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political control, or a statement of fixed ends which it is the business of educators to reach by whatever means they are told to use.

THE PHILOSOPHICAL FOUNDATIONS OF EDUCATION

When we look at the philosophical foundations of general education, we have to look both at the explicit statements made by those who write statements about the philosophy of education and at the actual practices and methods in use in the school and college. This concerns not only the work done in classrooms but also the other forms of experience to which the school or college commits its students. For example, the philosophical foundations of education for medieval society consisted in a set of absolute truths which had the authority of the established order of church and state to support them. Although the terms used were those of Greek thinkers and Christian theologians and dealt with metaphysical universals, the social philosophy implicit in the methods and practices of the medieval universities was one of authority and control. Similarly, the philosophical foundations of large sections of contemporary American education are stated in terms of traditional European rationalism and emphasize the development of man's rational nature, while the philosophy implicit in the program of campus life emphasizes the development of social adaptation to a system of dating, athletic contests, and success measured by personal popularity. One of the principal tasks of any program of general education, over and above the task of constructing an appropriate syllabus, is to draw together the curriculum and the extra-curriculum experiences into a meaningful pattern of liberal education. This can only be accomplished by joint planning between faculty and students, by means of which the students are given responsibility and authority for combining the interests of their lives with the aims of liberal education. Otherwise, the philosophy implied by student attitude and behavior in college works against the philosophy by which the college is organized.

It is interesting and fruitful to look for these implicit philosophies, as well as to look at the philosophical statements of educators. No philosophical concept or philosophy of education ever appears in actual existence as a pure form, and no matter how an educator tries, he cannot build an educational institution upon conceptions which then reproduce themselves in reality. Any idea for education, except that of a military academy, becomes so modified in practice by the character of the individuals who make up the institution that it would be fairer to say that what we have is a set of leading ideas which are

then recreated in various forms by those who teach and those who learn.

CONTEMPORARY TRENDS IN AMERICAN PHILOSOPHY

Before dealing with the philosophy of education in America, it might be useful to say something about the main trends in philosophy itself. Since few philosophers in America during recent years have dealt directly with the philosophical issues involved in education, these trends have little immediate relevance to educational reform. Indirectly, of course, there are significant relationships which often go unnoticed by both philosophers and educators. These are to be found chiefly in implicit assumptions made about human nature and the nature of intelligence which are accepted by educators, faculty members, and administrators as a basis for new curriculum-planning. Those who differ from the classic theories are usually quite explicit about it.

In the field of contemporary American philosophy there are three main trends which can be distinguished. The first is that of naturalism and instrumentalism, stemming from the work of William James and John Dewey, and related to the nineteenth-century European movements represented by Darwin, Bergson, and the philosophy of organism. Whatever its variations, its central emphasis is empirical. It relies for its ultimate conclusions on knowledge from the sciences and admits of no separate order of reality from that of natural phenomena. The second is that of rationalism, which avoids, for the most part, the immediate American influences and the nineteenth-century European movements and goes back, on the one hand, to Greek philosophy with emphasis on Aristotle and, on the other, to the medieval period with emphasis on St. Thomas. It relies upon the reason to apprehend universal truths, leaving to experience and to science the realm of partial truth. The third is that of analytic philosophy, influenced by Bertrand Russell, G. E. Moore, Carnap, Wittgenstein, and the logical positivists. This movement is in part a reaction against nineteenth-century romanticism and the philosophies of history and concerns itself with the theory of knowledge, the analysis of propositions, and the reduction of meaning to symbols and logical forms. The more radical movements which are found in contemporary European philosophy, among them the various kinds of existentialism and of Marxism, have had few counterparts in American philosophy, partly because the social and intellectual crisis in which Europe found herself after the world wars was not seriously felt in American philosophical circles and partly

because, in its social dimensions, philosophy in America has become more and more house-trained, conventional, and academic, by its continued residence within the academic departments of the universities. Philosophy is taught and written in America by philosophers as a branch of intellectual history, and the impact of political and social events in the twentieth century has been muffled by the distance which lies between the academies and contemporary life.

Other movements in philosophy exist but are not as directly relevant to the purposes of this book as the three I have listed. Two of the most important consist of the critical realists, represented by Ralph Barton Perry, A. O. Lovejoy, and others, and the idealists, represented by G. W. Cunningham, W. E. Hocking, W. E. Urban, and others. The creative energy which marked the work carried on in these two movements was spent in the earlier of the past fifty years and has now limited itself to fighting a rear-guard action against naturalism.¹

Of the three trends noted above, the first, naturalism, and the second, rationalism, have their counterparts in educational theory and practice, and the third, analytic philosophy, although incapable of producing an educational theory, has expressed itself in contemporary culture through its contributions to the general field of semantics. The relation between the philosophy of John Dewey and the educational reforms of the past forty years in this country is, of course, clear and direct. Dewey's concept of experience, his ideas concerning growth, maturity, and learning, his emphasis upon interest and need and their relation to effort, his emphasis on the relation of life to learning, the school to society, and education to democracy, have all had a significant effect in educational reform. It is more difficult to assess the relation between specific American philosophers other than Dewey and the reforms in schools and colleges. As far as the nursery schools, elementary schools, and high schools of the country are concerned, whatever significant reforms have occurred were the result of the use of Dewey's ideas. The nursery school and the elementary school were the center of this reform movement. The colleges of liberal arts, with the exception of a half dozen experimental institutions, have been influenced more by the classical humanists and rationalists than by

¹ For a full discussion of contemporary trends in American philosophy, see *Philosophic Thought in France and the United States* (Edited by Marvin Farber. Buffalo: University of Buffalo, 1950) and *American Philosophy Today and Tomorrow* (Edited by H. M. Kallen and S. Hook. New York: Lee Furman, Inc., 1935).

Dewey's philosophy, and have tended to cling to the traditional European ideas of the nature of higher education.

THE INTELLECTUAL AND SOCIAL ENVIRONMENT

But more important than the direct influence of philosophers writing about educational theory has been the cumulative effect of a number of social and intellectual factors, along with the recent history of political and economic change. America has experienced a stiffening in attitudes, by which thought and action in every part of the national life have become much more conservative. In the field of education the conservative movement is in part due to the increase in international insecurity and the dangers of war and in part reflects an uncertainty on the part of the whole country about our moral and political strength. In consequence, there is greater intensity in the search for intellectual and moral certainty through philosophies based on dogma. There are powerful social and psychological motives for the search for unity in philosophy and in education. At one level such unity is sought as an antidote to the disintegration of knowledge produced by the elective system. At another, unity of belief is sought to cure the disintegration of liberal values which has come as a result of the forces at work in contemporary world society.

It is to be expected at a time when most people are afraid of what may happen to America and to the world that American education should refuse to run the risks of experimental thinking and practice and should try to recapture the unity and rational certainty of earlier times. The dominant movement in general education in 1950 indicates the refusal of education to take risks or to leave the certainties of the past.

It is also to be expected that the programs of general education which receive most attention would be those which give most promise of providing an orderly and unified system of ideas and values. The common factor in all current programs of general education is the insistence upon unity, integration, and the development of liberal values. The growth in emphasis upon general education is due, as has often been said, to the necessity of reuniting the disparate and unrelated elements of the former college curriculums, the necessity of replacing the narrow specialism of that curriculum by a breadth of general knowledge, and the necessity for providing those forms of knowledge which will be useful to students, not merely for vocational purposes, but for introducing the liberal values of the arts and sciences

into their lives. There is no question as to the need for developing within the main body of American society a national instrument for creating enlightened and liberal citizens. We have agreement on this point from every quarter of educational opinion. The actual questions regarding general education move directly to the specific process: By what standards do we choose the materials of the curriculum from the welter of available knowledge open to our choice? How do we decide what ideas, values, and forms of knowledge are most significant in the development of the modern citizen?

It is only by philosophical inquiry that such decisions are ultimately reached, and it is only by appeal to some set of philosophical principles that standards of choice are ultimately established. Otherwise, education or any other social enterprise is blind and empty.

What are the philosophical principles which underlie the choices now being made by those who are planning programs of general education? In what follows, I have tried to identify these principles or philosophical foundations and to comment upon what seem to me to be three general divisions of thought: first, the philosophy of rationalism, represented in its purest form in the Roman Catholic institutions and at St. John's College, Annapolis; second, the philosophy of neo-humanism or eclecticism, represented by the program of general education at Harvard College and Columbia College; third, the philosophy of naturalism or, more specifically, instrumentalism, represented by Antioch College, Sarah Lawrence College, Bennington, the experimental colleges, and various other experiments within the state universities, notably, the University of Minnesota. The concept of the community college, as proposed by the President's Commission on Higher Education bears a close relation to this philosophy.

These divisions, like all philosophical categories, are to some degree arbitrary, and the names I have given them are to some degree inaccurate. As I have already said, actual programs of education never appear as pure types, since their quality and content depend upon the teachers and their students, working together. However, I hope that the divisions will serve to provide useful distinctions for the discussion of different points of view in philosophy and in education. My own point of view, as will be clear from the kind of analysis I have undertaken, is that of a naturalist and instrumentalist.

THE PHILOSOPHY OF RATIONALISM

Among the advocates of pure rationalism are the neo-Thomist thinkers, led by Jacques Maritain, who provide the theological and

metaphysical foundation for programs of general education in religion and in the classical humanities for the Roman Catholic colleges. In these colleges, the unity for which educators are in search is found in a system of absolute truths concerning the nature of man, his relation to God, and the hierarchy of being which makes up the Thomistic universe. In a variety of ways, Mortimer Adler has lent strength to this position, relating it to secular institutions of education by his influence upon Robert M. Hutchins and others. In advocating the reform of the entire system of higher education in this country, Adler, and through him, Hutchins, insists upon a return to the classical unity of the medieval university in which the prescribed texts of the Western tradition are studied for the purpose of discovering the principles of thought and morality which can be said to apply to all events, relations, and objects of the external world. Mark Van Doren has extended his support to the movement, along with Scott Buchanan and Stringfellow Barr.²

The advocates of rationalism hold in common the belief that within the work of the classical thinkers is to be found a set of objective principles and of absolute values which reflect factors inherent in the universe and inherent in the relation of man to nature. The metaphysics is that of neo-Thomism, in which a system of rational principles is working out its destiny with the universe as its instrument, and man occupies a place in a hierarchy of being which is above the animal and below the realm of pure spirit or God. In view of the fact

² There is no complete statement of the philosophical foundations of the rationalist position in current literature, although there are many descriptions of what is wrong with other positions, and there are partial statements of the philosophy by which a general-education program of this first variety can be formed. The body of opinion from which the philosophy can be extracted, however, is contained for the most part in works of various kinds by M. J. Adler, *How to Read a Book: The Art of Getting a Liberal Education* (New York: Simon & Schuster, 1940); R. M. Hutchins, *The Higher Learning in America* (New Haven, Connecticut: Yale University Press, 1936), *No Friendly Voice* (Chicago: University of Chicago Press, 1936), *Education for Freedom* (Baton Rouge, Louisiana: Louisiana State University Press, 1943); J. Maritain, *Education at the Crossroads* (New Haven: Yale University Press, 1943); A. J. Nock, *The Theory of Education in the United States* (New York: Harcourt, Brace & Co., 1932); Mark Van Doren, *Liberal Education* (New York: Henry Holt & Co., 1943), and in statements by Stringfellow Barr, Scott Buchanan, Gordon Chalmers, Alexander Meiklejohn, Raymond Weaver, and others, including those listed above. For the purposes of this chapter, illustrations have been drawn from Van Doren's book, *Liberal Education*, since it is the most complete and uncompromising statement of the ideas and the curriculum projected by the rationalist position.

that the distinctive factor in man is his rationality, the cultivation of man's reason is the sole aim of education, or, of life itself. Since the reason is a separate entity, cut off by definition from its social and physical origin, and is everywhere the same, education must be everywhere the same. The values and truths which are universal are to be found in the texts of the Western tradition, and the reason, which has its own proper business in thinking and in perceiving abstract ideas in their true relation, can discover truths which are intrinsic in the universe by the application of intellectual effort to the correct texts.

It follows, therefore, that the clue to a program of general education is to be found in a serious study of the past—the study of those literary and philosophical works which have dealt with human destiny and the relation of man to nature. Under the heading of “The Great Tradition,” Mark Van Doren describes in his book, *Liberal Education*, the educational plan which stems from the philosophy of rationalism. “The medium of liberal education,” he remarks, “is that portion of the past which is always present. It consists of the liberal arts, literary and mathematical, because they control thinking whenever thinking is done; and equally it consists of the great works in which meaning has been given to the ideal statement that human life is itself an art.” The materials for the intellectual development of the student are “the best works of the best imaginations,” and the supporting medium for them is the “great tradition of the liberal arts.” “That medium and what it contains, the bone and the marrow together, suggest that a curriculum already exists. It remains only to be rediscovered and to be put into effect by teachers who know how discipline in language, literature, and science is best made lovable and desirable, and who have that discipline themselves because they have mastered its medium.”³

Since the classical disciplines produce rational truths about man and nature which are universal, this curriculum of general education is valid for all students at all times. A study of them leads to an understanding of the Western tradition, and will, if correctly taught, lead to the acceptance of a philosophy and a theology in which the relationship of man to nature and man to God will be clear. In the case of the Roman Catholic colleges, the discipline in theology is more rigorous than that suggested by Van Doren and Hutchins. However, the Thomistic world-view, or the philosophy of the “great tradition” is implicit in the educational program recommended . . . “As every

³ Van Doren, *op. cit.*, pp. 144-45.

man is a philosopher of sorts, so every man is a theologian if he can see beyond his nose."⁴

The practical program of the rationalists consists, then, of lectures, discussions, and reading of material drawn from the history of literature, philosophy, science, and the arts. The aim of general education in this system has been achieved when it can be demonstrated through examinations that the content of these materials has been perceived, remembered, and understood. The good life leads in the direction of contemplation; and the ability to reflect upon, analyze, and manipulate ideas is the most noble form of human activity. The presence of rational principle in the mind is not only the mark of the highest human value but is also a value intrinsic in the universe. Accordingly, empirical social science, the concern with contemporary issues, the intimacy of theory with practice and action, and the creation of new works of art as an educational means have little place in general education for the rationalist. It is assumed that the student may apply the general principles he has learned whenever an occasion arises which demands a decision on his part, since the principles of truth and morality are universal and each situation is covered by a form of natural law.

The social philosophy implicit in this system, but rarely stated, is that of the protection and conserving of an orderly society. The values of that society are ethnocentric and are those of a small segment of the social order, the Roman Catholic clergy, the educational elite, the owners, the rulers, the philosophers, and the scholars of the Western world. It is a philosophy of education designed to preserve Western tradition and to gain unity by setting down a standard pattern of principles. In the relation of man to society, it implies a class system in which only those who show talent for the perception of abstract truths are capable of absorbing the materials of higher education. Those who are not fitted for abstract thought and are "herd-minded" must then be assigned to the vocations which keep the social system moving, and which support the structure in which the intellectual can carry on his work.

At the same time, another assumption can be discovered here, regarding the relation of thought to action. When we look for the role which the intellectual or the educated man should play in modern society, we find that his duties and responsibilities have to do with a series of elaborations on the truths he has already learned. There is

⁴*Ibid.*, p. 143.

no direct relationship between general education conceived in this pattern and personal or social action; there are no aspects of the educational philosophy which involve analysis of the existing social order or creative work in its reform. It is assumed that the student who has been educated in the rationalist style needs only the ability to reason on the basis of his knowledge of the Western tradition in order to carry out the responsibilities of citizenship.

The influence of the rationalists has been indirect, although important. Naturally, the position of the Roman Catholic colleges has been strengthened by this intellectual support, particularly since a wide audience has been given to Maritain's and Adler's ideas through the work of Hutchins, Van Doren, and the program of One Hundred Great Books at St. John's College. In only one or two instances in institutions outside the Roman Catholic Church has the Adler proposal for general education of this kind been accepted as a total answer. On the other hand, in those sections of the college curriculum devoted to programs of general education, where literature, philosophy, and the arts are involved, educators have seen in it a clear, unequivocal way of laying a basis of prescribed texts which can furnish a common body of knowledge to all students. Many of the curriculums of general education in the humanities which form a part of the required "core" programs in the large universities are influenced by the philosophy of rationalism. Among these are the programs at the University of Chicago and the two-year program in the humanities at Columbia College.

In answer to the question then, as to how can we bring unity into the disparate elements of contemporary knowledge, the rationalists have replied that a unity exists in nature, the great thinkers of the classical tradition have discovered it, and the function of general education is to bring these thinkers to the contemporary student, and, by the aid of scholars in the field who are familiar with the texts, teach them the meaning of the Western tradition and Western values.

ECLECTICISM AND NEO-HUMANISM

The philosophical foundation for the second kind of general education is eclectic in character, and I believe can best be described as neo-humanist. By this I mean that the advocates of this solution work within the European academic tradition and accept the notion that there is a dualism between mind and body and that there are proper subjects for the training of the mind, as in the case of the rationalists, but that there is no specific philosophical system which supports the program they recommend. Instead, there is an acceptance of the idea

that, in order to avoid vocationalism and the use of knowledge for particular ends, it is necessary to include in the program of general education those subjects which can be distinguished from other subjects by the fact that they have no immediate, direct, or specific vocational values.

This kind of program is best illustrated by the philosophy and practices described in the Harvard Report, *General Education in a Free Society*. Since the middle of the nineteenth century, when it became clear to most sensitive social critics that the classical unity of the Greek-Judaic-Christian tradition was beginning to go, all secular and Protestant colleges have been in the process of change away from the rationalism of the eighteenth and nineteenth century educational theory toward a cultural pluralism and a philosophy more appropriate to the diversity of knowledge and the relativism of values. This is true of the Protestant denominational colleges as well as the secular institutions, since, during the past hundred years, the rigidity of Protestant dogma and its educational accompaniment has been broken by the pressure of needs of the students and of society. The introduction of the elective system at Harvard in 1872 was the first mark of this change. What is now meant by the term "general education," as practiced at Harvard and, in one form or another, accepted as an accurate description by most other colleges, refers simply to the distribution of knowledge into the conventional four divisions and to the content of individual courses and the purposes for which they are taught. This purpose is stated as nonvocational, nonprofessional, and nonspecialist for cultivating a sense of values and for developing clear thinking and an understanding of the physical and social world, as well as an appreciation of the traditions of Western civilization. In the statement of aims, this philosophy differs very little from that of the rationalist. Its theory of knowledge separates mind from body, reason from emotion, and thought from experience. It also holds the view that there is objective value, as well as social education, in a knowledge of the Western tradition.

Where it differs from rationalism is in its refusal to state a general or specific philosophy to which all students should be committed, and according to which a curriculum should be constructed. Because of this refusal, it is very difficult to find a name for the philosophical position on which the program of general education rests. We have agreed to the term *neo-humanist* or, alternately, *eclectic*, to describe the philosophical foundations, on the grounds that the philosophy is one which emphasizes the humanist tradition of Western culture, the

"rational guidance of all human activity," and the fact that "the tradition which has come down to us regarding the nature of man and the good society must inevitably provide our standard of good."⁵

The basic difference between this position and the rationalist is revealed in the discussion of general education contained in the report of the Harvard Committee on *General Education in a Free Society*, a document which has had considerable influence in shaping the ideas of reform throughout the colleges. The report recognizes a difficulty in the rationalist theory which the rationalists themselves have glossed over—that is, if we consider the tradition of Western culture as a whole, there are so many disparate elements in the tradition, so many contradictions in philosophy, and so many fundamental conflicts between world-view and moral system within each of the thinkers that it is impossible to assume that a survey of the works of the past will develop any general philosophy in the mind of the student. The only way to make sure that such a philosophy actually did emerge would be to teach its basic tenets by authority, or as revelation, and treat all other philosophies as various forms of heresy. This would be the sole method of accommodating the ideas of Marx with Locke, Hobbes with Aquinas, Hume with Descartes, and any of the others where basic conflicts of value are to be found.

In making this point, the Harvard report asserts that "the appeal to heritage is partly to authority, partly to the clarification of the past about what is important in the present. All Catholic and many Protestant institutions thus appeal to the Christian view of man and history as providing both final meaning and immediate standards for life." The report goes on to say that "there is a sense in which education in the great books can be looked at as a secular continuation of the spirit of Protestantism."⁶ The report acknowledges the difficulty involved in either breaking with tradition, as Dewey suggests, or in clinging to it, as Adler recommends, and states that, "The true task of education is, therefore, to reconcile the sense of pattern and direction deriving from heritage with the sense of experiment and innovation deriving from science that they may exist fruitfully together as in varying degrees they have never ceased to do throughout Western history."⁷

⁵ *General Education in a Free Society*, pp. 75, 51. Report of the Harvard University Committee on General Education. Cambridge, Massachusetts: Harvard University Press, 1945.

⁶ *Ibid.*, pp. 43-44.

⁷ *Ibid.*, p. 50.

The philosophy underlying this general-education program is thus more genial, flexible, open-minded, and tolerant than the rationalist, since its basic concepts are less rigid and more inclusive. However, it does conceive of the tradition of the West as one of literary, philosophical, and intellectual development rather than as a segment of social history. In this sense, its theory of history is one which stresses the role of ideas in producing social change and which stresses the notion that our moral values come to us, not from the cultural and social patterns which have developed in our part of the world due to economic, geographic, physical, and psychological factors, but from the ideas of the intellectuals. Thus, "science has implemented the humanism which classicism and Christianity have proclaimed,"⁸ or, to put it differently, science is the means by which we carry out the values given to us by religion and the classical authorities. This distinction between scientific fact and moral value, which runs throughout the report, rests upon the assumption that the method by which truth and moral choice is reached lies within the literary and philosophical disciplines, while science, incapable of anything but validation of fact, cannot find a way toward ultimate reality or moral ends. On this point it agrees with the rationalist philosophers and is in direct disagreement with the naturalists or instrumentalists, who hold that science has to do with the establishment of human ends as well as with human means.

The theory of human nature assumed by the neo-humanist is the classical one, in which there are faculties of reason, imagination, and memory, working as parts of the intellect, each of which has its appropriate area for education. Although most educators of this group speak of the necessity of educating the whole person, by this they refer to the harmony of the desires with the reason, or the control of emotion by the intellect. The practical proposals for educational programs provide little means for the emotional, personal, and social development of the individual, except as these can be found in the study of the subject matter of the curriculum itself. The assumption here is that knowledge is itself a good and that a knowledge of the good will lead to a commitment to the good. The criterion of selection of the materials and program of the curriculum thus becomes one to be decided by faculty discussion and a pooling of ideas as to what knowledge is appropriate for the subject matter of education in the four major fields. There is no reference to contemporary research in the field of emotional development or in those phases of social psy-

⁸ *Ibid.*, p. 50.

chology which have to do with education. The reforms of this movement are almost exclusively with subject matter. The assumption, therefore, must be that emotional and social development occur normally as an effect of academic study.

Further evidence of this assumption about human nature comes from a study of the usual curriculum proposals regarding the arts. The performing arts are excluded from the curriculum itself, and in their place are put the history and appreciation of the arts, conducted in courses of the regular academic kind as subjects for general education. Creative work by students in the arts is usually diverted to the accidents of extra-curriculum interest, and no aesthetic education is included in proposals for reform. If the emotional and aesthetic life of the student were a significant concern of the neo-humanist, it would follow that education in the creative and performing arts would be an essential part of the curriculum itself, and if the theory of human nature were actually one which rested upon contemporary knowledge in the field of psychology, a great deal of emphasis would be placed upon the community of interests and needs which is contained within each student body of each college.

Perhaps the simplest statement of the philosophical foundations of the neo-humanist program would be that the ideas which can be discovered by a study of its literature, philosophy, science, arts, and institutions in Western culture will provide a common background of knowledge and value for all students in college. A knowledge of these ideas and values will create a commitment to democracy and Western ideas. The student who has learned something of the chief ideas which sustain the Western tradition in the arts and science will then be enabled to move forward to his work in becoming a specialist in a profession at the same time that he becomes a responsible citizen in his society.

The neo-humanist is the most common form of philosophy for general education, and these are the most common assumptions which can be drawn from a study of the various programs built on this foundation. It is assumed that the "cultivation of a sense of values" and the "development of clear thinking" will come largely from the fact that the subjects to be studied are clearly organized and the sense of values is implicit in the subjects. The task for the teacher, therefore, is to present as well as he can the materials of the four major areas of knowledge and, by the arrangement of the various subjects and by pointing to connections and relationships between them, to provide a meaningful pattern. It is assumed that such a pattern will create in

the student mind the sense of unity and integration of knowledge and value for which general education is invoked. The search for unity by the neo-humanist has ended in an objective order of subject matter, which can, by its selection of significant ideas and information, form a common body of knowledge for contemporary education.

The social philosophy beneath this conception of general education is not clearly defined, although, again, it is assumed that the study of the Western tradition will lead to the advocacy of democracy by the student. The social role which the student is expected to play after graduation from college is one of adaptation at a moderately high level to the existing social order, and the values recommended are, in practice, the neutral ones of tolerance, skepticism, and individualism. There is no explicit dynamic of social change and no direct link between the educational program and a social philosophy. The effect of both the rationalist and the neo-humanist viewpoints upon the development of higher education in the future will be to make it more formal, more structured, and more academic. The combined effect of both programs is to make educational planning more conservative and cautious, to standardize a curriculum for all, and to draw attention away from the actual process of student learning and the concrete existence of the students themselves while directing professional interest toward a rearrangement of reading materials. In many instances, planning for general education has meant simply the reformation of book lists, the requirement of general courses, and the construction of a syllabus.

NATURALISM AND INSTRUMENTALISM

The instrumentalist philosophy of education puts its chief emphasis on the uses of knowledge. The instrumentalist theory of truth works outward from individual experience to concepts and facts which are continuously reaffirmed or denied by subsequent experience. Facts which are denied by further experience become false, those confirmed continue to be true. There are various ways in which experience itself can be made more precise in its detections of fact and in which a variety of methods can be drawn from observation and induction to safeguard the individual from undue error. Truth in this system is in process of being created from moment to moment, and the perspective from which one looks at the truths stated by others or created by one's self has a great deal to do with the truth which one finds.

Similarly, the values which are held by any society are those which depend upon the unique context of the individuals within their own

society. For the instrumentalist, there are no absolute truths or values. There are, instead, varying degrees of certainty and conviction, based upon the experience of the human race with particular truths and particular values. In place of a fixed aim or fixed principles for education, the instrumentalist position is that aims and principles are to be defined in terms of the growth of maturity and of personal qualities within the student and not in terms of an intellectual discipline for training the reason.

In place of absolute standards of moral and intellectual conduct, the instrumentalist puts standards which are learned through experience to be adequate when tested constantly by individuals who make moral and intellectual decisions. The basic assumption upon which the instrumentalist rests is that truth and goodness are found through inquiry and active search, through the experience of finding that certain values, ideas, and acts *are* true and good. Beneath this assumption lies a deeper one, that the human reason is a part of nature—that part which acts to conceive goals and standards by which life, truth, and morality can be judged. The analysis and refinements of experience then provide the principles and standards which both serve as tests and which themselves are tested in the context of further experience.

The instrumentalist in philosophy does not believe that principles and standards, arrived at and described in this way, are any less certain than those reached by revealed truth, absolute authority, or rationalist conviction. He is asserting, rather, that when the process of reaching truth is described, his description seems to be more accurate and at the same time less dogmatic. In his view, to conceive truth as an hypothesis to be tested is not to relinquish one's grip on rational certainty but to take into account the fact that rational certainty depends upon many factors, some of which are nonrational.

Reason and emotion, that is, knowing and wanting, are described as parts of an organism at work in ways natural to itself, and the emphasis is placed upon integration and continuity—the integration of the passions and the intellect, of thought and action, of heredity and environment, of the individual and society, of the past and the present, of knowledge and values, of matter and mind. This marks a fundamental difference from the rationalist way of thinking, where the method is to mark off segments of reality from each other, and to stress differences and discontinuities between concepts. For example, liberal education for the rationalist is separated from vocational edu-

cation, the worker from the intellectual, the artist from the scientist, the past from the present, truth from its context, and education itself is conceived of as a separate term for disciplines and training in the realm of ideas.

Fundamentally, this is a difference in logic, with the rationalist using the Aristotelian system, or a logic which classifies thought into opposites, contraries, contradictories, or separate entities, and the instrumentalist system developed by Dewey, which makes logic a theory of inquiry whose theory changes as new concepts are developed. Behind this difference is the ultimate distinction between the idea that thought is the primary reality of existence, and the idea that existence itself, and consciousness of that existence, is the primary reality out of which everything else comes.

The theory of human nature of the instrumentalist develops from this point. The individual consciousness, reacting to the unique circumstances in which it finds itself, begins to form its own pattern of behavior, emotional, intellectual, physical, all at once, and begins to make for itself its own life. Then follows the basic moral assumption that within each individual there exists a potential for growth toward co-operative ways of living, thinking, and acting and that these ways produce a richer and more satisfying life for the individual and his society than others reached by other methods. If there are no rational, eternal laws of nature, or no moral laws intrinsic in a rational universe, there are no rules for human conduct which can be laid down in advance, according to which all human beings should behave. Instead there are patterns of behavior worked out in practice, which are more or less productive in terms of individual richness and social desirability. The moral element in the instrumentalist philosophy is the insistence upon the value of free spontaneous growth.

In operation, an educational system of this kind places its emphasis upon the individual student and the quality of his experience and tries to arrange an educational environment in which it is possible for the individual to find his own way toward full development. This has partly to do with subjects in the curriculum and partly to do with the relation between the needs of the student and the knowledge available to meet them. The system changes its methods and principles as it goes along and as the needs of the individuals and their society change. Decisions as to what should be taught and the way it should be taught are made by reference to the usefulness of the knowledge in everyday life. Knowledge is conceived of, not as an end in itself, but as a means

to a "more abundant personal life, and a stronger, freer social order."⁹

In terms of general education in American society, the instrumentalist philosophy sets up two criteria for planning a curriculum, (a) what kind of knowledge and experience can contribute to a more abundant personal life, and (b) what kind of knowledge and experience can contribute toward a stronger and freer social order? In answer to these questions, the instrumentalist chooses to deal more directly with problems and issues in contemporary society and to bring to bear upon the problems whatever resources can be found in the realm of the sciences, the arts, and the humanities to clarify and illuminate the everyday experience of the student. In place of the fixed aim and the fixed subject matter of the rationalist and the eclecticism of the neo-humanist, this philosophy puts a curriculum in process of development which changes according to the texture of the student-body and the structure of the larger society in which the students will live after college.

The Emphasis upon Social Philosophy

The social philosophy underlying the instrumentalist position is explicitly that of democracy. The theory of truth, by which the individual contributes to a body of collective experience composed of individual truths, implies a social system in which the individual is free to develop and to assert his own truth and value system. The theory of society, on the other hand, is one which denies the principle of an educated class as distinct from other social groups and insists upon the maximum education for all. This gives specific social direction to general education, since there must be continual social education in the methods and ideals of democracy if the free growth of individuals is to continue in the society they are creating. The ideas upon which the instrumentalist philosophy rests were first developed in the work of Dewey, had their first application in private experimental schools, spread throughout other areas of the school system, were developed in a half dozen experimental colleges during the 1930's, and have received their most recent exposition in Sidney Hook's *Education for Modern Man* and in the Report of the President's Commission on Higher Education. Hook states the social point briefly when he says,

The philosophy of progressive education had from the outset been committed to the belief that only in a democracy, and in a continuously expanding

⁹ *Higher Education for American Democracy*. Vol. I. *Establishing the Goals*, p. 49. Report of the President's Commission on Higher Education. Washington: Government Printing Office, 1947.

social democracy, can the end of individual growth be achieved. This follows from the concern with which the needs of every child were to be considered, the necessity of harmonizing these needs to permit their fruitful expansion, and the recognition that genuine equality of educational opportunity demands social democracy at one end and industrial democracy at the other.¹⁰

Such a philosophy, Hook goes on to point out, could not operate in a stable class society, since the philosophical idea on which it rests demands the breakdown of class structure and its replacement by a mobile and flexible system through which individuals may move.

The Report of the President's Commission makes the same point:

The social role of education in a democratic society is at once to insure equal liberty and equal opportunity to differing individuals and groups, and to enable the citizen to understand, appraise, and redirect forces, men, and events as these tend to strengthen or to weaken their liberties.¹¹

Throughout the statement of aims for general education, the Report continues this emphasis upon the social role of education and, both directly and by implication, takes the instrumentalist position.

The Influence of Instrumentalist Philosophy

The impact of the instrumentalist philosophy, along with the impact of modern society itself, has been to emphasize the need for an educational program which will serve as an agent of social transition. For the first time in the history of American education, a group of representative American educators, writing a research report at the request of their government, have proposed in the Report of the President's Commission on Higher Education a philosophy of education as one aspect of cultural policy. The fact that the philosophy they propose is instrumentalist, or "progressive," means that there is a dominant strain of philosophy underlying educational reform which, at the moment, has not received the attention being accorded to the other systems.

The philosophy exists in practice however, in the operation of a great many of the state universities. This is not so much the result of a self-conscious adoption of the system of ideas in instrumentalist philosophy. It is the result, rather, of the fact that a rapidly expanding country had basic social needs which could only be met by institutions of education. Knowledge of biology, chemistry, agriculture, physics, mathematics, engineering, law, medicine, social science, and many other fields became a necessity in the growth of an organized society. A

¹⁰ Sidney Hook, *Education for Modern Man*, p. 53. New York: Dial Press, 1946.

¹¹ *Higher Education for American Democracy*, op. cit., p. 5.

knowledge of Latin, Greek, poetry, literature, the creative arts, or philosophy was not considered a necessity for such growth but was an extra "cultural" aspect of human life which was the educational counterpart of the opera house of frontier days.

This attitude toward the arts and toward the humanities still lingers in the universities. It can only be changed when we can find teachers who are themselves absorbed in the creative arts and humanities, for whom art is a significant part of everyday life, and whose teaching is an expression of a fundamental interest in sharing their experience of the arts with young men and women and a wider public. One of the difficulties in the proposals for general education made by the rationalists and neo-humanists is that they are made in the spirit of bringing *culture* to the culturally deprived rather than quickening the interest of students in new forms of experience.

The vocationalism, which is so much deplored by neo-humanists and rationalists alike, is an integral part of the educational necessities of American society and is a word which has come to be used in a pejorative sense to describe the kind of education appropriate to the "hand-minded." Actually, it is nothing of the kind. The professions are vocational, whether they are professions of teaching, doctoring, or administering, in exactly the same sense as any other human activity which requires the development of certain abilities and skills. The difference between the study of the French language for purposes of teaching it to others, for purposes of calling a taxi in Paris, or for purposes of enjoying the richness of a literature and culture which otherwise might remain inaccessible, are not mutually exclusive but are parts of one general purpose which contains them all, that is, for the use and enjoyment of life.

The inconsistency in our system of higher education as it exists today is that, while it is assumed that the study of a foreign language is conducted for the liberal purpose of enriching human life, actually it is being conducted either as a discipline for training the powers of memory or for the vocational training necessary for teaching it to others. It is this fatal split between the use and the enjoyment of knowledge which has destroyed so much of the value of what we have learned to call general or liberal education. The question actually is, how can we teach the arts and sciences in such a way that they serve to enrich and improve the quality of human life?

This is not an argument to support the notion that a knowledge of cosmetics or hair-doing is a significant part of a liberal education or that there is no difference between carpentry and philosophy. It is

an argument to establish the purposes for which knowledge of the liberal arts and sciences should be taught. The factor which determines whether or not an art or a science is liberal is whether or not it relates to the enrichment of the life of the individual who learns it. Enrichment in this sense goes beyond the practical use made of it in earning a living or in altering the physical or social environment, into its use as serving the interests and needs of the individual.

It is for this reason that the instrumentalist believes that any program of general education which is intended to develop liberal qualities in the student must be related to the needs and interests of the student. Otherwise, the subjects of education will be studied for purposes alien to the central purposes of liberalism. It will be studied to pass examinations, to secure academic credits, to obtain a degree, and thus, to take a vocation. However, in this case, the vocation is one in which most of the knowledge acquired is irrelevant, since it has had nothing to do with either the personal development of the student or with the requirements of employment.

The Question of Interests and Needs

In approaching the question of the content of general education, those who follow the instrumentalist philosophy ask first of all, what are the uses to which the knowledge will be put, then, what are the needs of the particular individuals the educator is asked to educate, and what are the general needs of society which must be met by a system of general education? These questions are also asked by the neo-humanists but are answered immediately by reference to the conventional academic program. What marks instrumentalist philosophy from the others is the fact that it relates the knowledge to be used to the stage of development which the students have reached and, thus, to the variety of abilities and backgrounds which each has had. Sometimes, as in the case of the state universities, this means that a Freshman student-body, which is not yet ready for the kind of advanced work appropriate to a highly selected student-body in another institution, begins to work with materials and methods adapted specifically to its own stage of development. This does not mean that the program of general education in this case has lesser value in a hierarchy of knowledge but simply that the education needed is different from the education needed by those with different preparation, aims, and talents.

As soon as the educator approaches the matter of human needs, he is faced with the ambiguity of the term. In one sense, it means

that the human organism demands certain things for survival and comfort, among them, food, clothes, housing, companionship, and enough knowledge to acquire these. In another sense, it means that, because he is human, man needs to know more than is necessary for survival; a free society needs men who can understand how to make it; man needs to know how to increase the scope of his experience in order to enjoy a fuller life and to enjoy experience for its own sake.

Many of those now in college are not conscious of needs in the second sense, and when educators say that the young *need* liberal education, they are actually saying that society needs liberally-minded people, although many of the students do not actually feel such a need in themselves. There is similar ambiguity in the concept of *interest*. In one sense of the term it refers to the particular things which young people in college like to do, either in choice of a study or in spending their time on the campus. In the other sense, it refers to what educators say are the interests of students, after finding out all they can about them.

It is because of this double ambiguity in interest and need that the philosophy underlying the instrumentalist program has been identified with naïve utilitarianism and hedonism. The philosophy itself belongs in the tradition of J. S. Mill, Spencer, Darwin, James, and Dewey, since it relates the individual to the society around him, rather than relating him either to a deity or to an abstract concept of reason, the state, or history. The utilitarian strain in the philosophy is only one aspect of it. The ultimate value upon which it rests goes beyond utilitarianism and becomes the quality of experience within the individual. The philosophy is stated in the Report of the President's Commission on Higher Education in these words:

The first goal in education for democracy is the full, rounded, and continuing development of the person. The discovery, training, and utilization of individual talents is of fundamental importance in a free society. To liberate and perfect the intrinsic powers of every citizen is the central purpose of democracy, and its furtherance of individual self-realization is its greatest glory.¹²

If this is the goal for democracy and for education, it is to be served by an education which rests on a philosophy of individualism, not individualism as a doctrine of enlightened self-interest, but individualism as the full development of the individual in the development of his society. In order to fulfil himself in the context of this moral philosophy, the individual must give part of himself to the others with

¹² *Higher Education for American Democracy*, op. cit., p. 9.

whom he lives and works. It is one of the tasks of liberal or general education to teach him the moral attitude involved.

THEORY OF HUMAN NATURE

At this point, a close relationship can be seen between a moral philosophy and the theory of human nature upon which the educational system rests. If the individual human being is said to grow in intellectual and emotional maturity by the kind of experiences he finds in his environment, then the educational program must be one in which he is taught the ideas and methods of co-operative social action toward ends which he helps to determine. The theory of human nature would imply, therefore, that he will learn these values both by the knowledge he is given and the emotional and social character of the community in which he is educated.

The instrumentalist in education points out that it is the data from psychology and the social sciences which provide the clue to making an educational program, not the body of knowledge which the rationalists and neo-humanists refer to as the great tradition or as Western culture. The intention of the new program is not simply to sharpen the reasoning powers of the student or to increase the powers by which he can serve his own particular ends, but to make him an active element in the creative change of the society around him. It seeks to mesh the individual and social aspects of education in such a way that the sensibilities of the private person and the commitments of the responsible citizen are developed together.

Because of the close relationship between the moral theory and the theory of human nature within this philosophy, its educational program makes use of psychological and social knowledge, both in the methods it employs and in the content of its curriculum. Great reliance is placed upon the use of research and the corrective methods of observation and analysis for learning about the success or failure of the program itself. In some cases, this involves a large amount of psychological testing; in others, it involves setting down long lists of desirable human characteristics and skills which are to be produced by various techniques of education. Although this often tends to oversimplify both the problems and the solutions and to reduce education to a matter of inventing techniques to achieve prosaic human virtues, its positive value lies in the insistent criticism it brings to the process of education.

It is, of course, true that there are many different kinds of general education which owe their form to this philosophical position. The

interpretation of individual and social needs has a variety of differences among educators, and the consideration of varying types of student bodies will push the program in one direction or another in so far as the student bodies themselves differ in their maturity, sophistication, cultural background, economic status, and high-school preparation. This means a great variety in the types of programs, content of curriculum, and educational results. The program of Bennington College, which bases itself upon the philosophical foundations I have tried to describe, is very different from that of Goddard College, and the program at Antioch College is different from that of the General College at the University of Minnesota, although all four would hold in common the basic assumptions of instrumentalism. The extent to which they differ depends, among other things, upon the extent to which the idea of relating education to individual and social need is interpreted as directly practical or as indirectly so. It also varies with the extent of emphasis upon vocation and the way in which the concept of vocation itself is interpreted.

THE INTERMINGLING OF PHILOSOPHIES

It is also true that there are many variations between programs of general education in the general philosophical categories of rationalist and neo-humanist, and there are mixtures of all three systems in one program. At the University of Wisconsin, there are two curriculums of general education, one an experimental program of an integrated kind which leans in the instrumentalist direction, the other a conventional program resting upon the usual divisions of knowledge and the general assumptions of the neo-humanist position. Although the latter program is more like general education at Harvard College, there are courses provided for Freshmen at Harvard which are very like those provided at Sarah Lawrence.

In the effort to classify the philosophical principles into some meaningful order, I have had to ignore certain of the distinctions which would separate one kind of program from another and have stressed only the similarities and common assumptions. The authors of the Harvard Report have distinguished five types of general education, those involving (a) distribution requirements, (b) comprehensive survey courses, (c) functional courses, (d) the great-books curriculum, and (e) individual guidance. However, these divisions are made more in terms of educational method and administrative procedure than in terms of philosophical assumptions. In this case, what are referred to as functional courses, i.e., adapted to individual needs, might also be

part of a system of distribution requirements yet be unlike the program of Harvard where there are distribution requirements. Similarly, a great-books curriculum might have close relationship with comprehensive survey courses, as in the case of the relation between St. John's College and the humanities program at the College of the University of Chicago.

The author of a recent survey of general-education programs¹³ has distinguished seven different types, represented by the College of the University of Chicago, the General College at the University of Minnesota, Sarah Lawrence College, Bennington College, St. John's College, Harvard College, and San Francisco State College. Here the similarities would be scattered throughout, with San Francisco linked with Minnesota, Bennington with Sarah Lawrence, St. John's with Chicago, and Harvard representing everyone else.

THE CLAIMS OF GENERAL EDUCATION

There is little difference, however, in the variety of educational opinion about the need for more programs of general education. Where the differences emerge as to how such programs should be conceived, I believe they will move toward one or another of the philosophical positions I have tried to describe. There will be those who believe that the universe can be understood by reference to a series of self-evident principles, the nature of which can be revealed through the study of philosophy and the humanities, the arts, mathematics, and the Western tradition. There will be others who believe that the history of Western man, in science, religion, philosophy, art, humanism, and society, has handed on a body of knowledge about ourselves and our world which must be disseminated among the young, preserved by them through their education, and expanded into new discovery through efforts of the imagination. There will be still others who believe that the universe is in a state of process whose outlines can be partially seen with the aid of science, and that man, as a part of nature, fulfils the responsibility of his humanity by acting upon nature to the benefit of man.

There will be many others who believe other things, as well as those who will invent ideas for the formation of new systems of thought. But in any case, there will be educators who, under the influence of one or another of these conceptions of man and the universe, will have their own ways of trying to develop young people who will consider such distinctions to be important.

¹³ P. F. Valentine (editor), *The American College*. New York: Philosophical Library, 1949.

CHAPTER III

PSYCHOLOGICAL FOUNDATIONS OF GENERAL EDUCATION

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INTRODUCTION

In the preceding chapter Taylor identifies the philosophical foundations of established programs in general education as these concepts have been expressed by authors writing about general education at the college level and as they may be inferred from actual practices in various institutions. In chapter iv, Havighurst describes the sociological beliefs and assumptions that seem to him to be inherent in the various general-education arguments and practices. The present chapter is based on much of the same literature and many of the same practices cited by Taylor and Havighurst, but the purpose is to try to identify psychological assumptions and convictions — especially beliefs about the nature of learning. Every program of general education is designed to facilitate student learning. The program of studies, or whatever other activities constitute the curriculum, exist in order to bring about changes in the behavior — verbal and otherwise — of the students.

Most programs of general education aim to be practical or useful. Statements like this are rare: "The primary objective of liberal education is truth for its own sake. . . . The main emphasis should always fall on understandings or insights for their own sakes, rather than insights merely as a means to action and belief" (8:37). The following comment by Hutchins is much more representative of the prevailing point of view: "We all want to improve society and we want college graduates, because of their education, to want to improve society and to know how to do it. Differences appear when we come to the method by which these educational objectives may be obtained" (12:27). Recommendations about these "methods" imply conceptions of learn-

ing, and the effectiveness of any specific program of collegiate general education depends in part upon the validity of these conceptions.

Taylor has described three different philosophic orientations that characterize the arguments advanced in support of various types of general education (chap. ii). These were named "rationalism," "neo-humanism," and "instrumentalism." The psychological beliefs of the neo-humanists and the rationalists, in so far as these beliefs are revealed in the literature on general education, do not seem to differ greatly. Consequently, the contrasts most frequently cited below are between the instrumentalists, on the one hand, and the neo-humanists and rationalists, on the other. The latter quite consistently argue for a prescribed program of studies, the content and sequence of which are seen as providing a valuable general education for all those youth who should be encouraged to go to college. The emphasis is usually upon a description of subject matter to be studied critically, as a result of which it is assumed that intellectual development will occur. In the present chapter, the authors representing this point of view are sometimes labelled "content centered," a measure adopted to avoid circumlocution, but with awareness of the danger in a label.

The instrumentalists advocate curriculum flexibility and provision for wide differences among college students with respect to many variables in addition to the time required to complete the general-education program. Attention is constantly called to the needs of students and to the importance of developing a general education that is appropriate to these needs. The kind of program these authors recommend is sometimes called, in the pages that follow, "student centered."

Probably the sharpest contrast between these two points of view toward general education is epitomized in this sentence written by Hutchins: "The cults of skepticism, presentism, scientism, and anti-intellectualism will lead us to despair, not merely of education, but also of society" (12: 38). The volumes written by various members of the Sarah Lawrence faculty (16, 17) as well as several other titles appearing in the bibliography at the end of this chapter (5, 9, 11, 20) make it quite clear that their authors feel no hesitancy about questioning the authority of the past. They contend that all experience must be submitted to critical examination in order to determine its validity as a basis for making decisions in the present. These authors, too, have little confidence in their ability to predict with much certainty what the future will be like. This is part of what Hutchins is disposed to call "skepticism."

This same group of authors puts great emphasis upon the present

needs and interests of students as well as upon the importance of devoting much attention to the social problems that characterize modern life. This, Hutchins feels, is the "cult of presentism." All instrumentalists contend that experimentation and the scientific method, applied to all areas of inquiry, give most promise for a better life. This, to Hutchins, is "scientism." And the attention given by the instrumentalists to the all-round development of students, with a consequent unwillingness to concentrate exclusively upon intellectual development is, to Hutchins, the "cult of anti-intellectualism." All of these differences that cause the two groups being contrasted to recommend different types of general education are based in part upon psychological conceptions.

The general plan of the present chapter includes, first, a brief statement about learning theories, the implications of these theories for educational practice, and a comment on the amount of attention given to learning phenomena in the literature on general education at the college level. This introductory material is followed by a brief description of the sequence of events in learning and an elaboration of several propositions about learning that seem to be supported by recent psychological research and speculation. In the case of each of these propositions, certain implications for college-level general education are indicated, as is the extent to which the propositions are supported or contradicted by the psychological assumptions and conceptions of the advocates of the various types of collegiate general education.

THE STUDY OF LEARNING AND LEARNING THEORY

Learning can be and has been studied from two different points of view. One focuses on learning as it is experienced and reported by the learner and the other is developed from the position of an outsider observing how another person or other persons learn. Each of these individuals — the learner, himself, and the outsider observing him — has access to data that are not available to the other. Most of the current psychological literature represents observations made of learners by an outsider. Rather recently there have been interesting and helpful attempts to develop a phenomenological frame of reference with major attention given to the way learning is perceived by the individual who is having the learning experience.¹ In most college programs the judgments as to whether or not learning has taken place are

¹See the books by Cantor (2) and Snygg and Combs (19) in the bibliography at the end of this chapter.

based almost exclusively upon observation by an outsider of students' verbal behavior — what he says or writes in response to questions or problems posed by someone else. Seldom are "the personal observations and experiences of the student in the campus activities and his off-campus activities and work" (9:75) given much attention. This is true despite the fact that much of the informal conversation among students implies that they sometimes learn "lessons" in college classes which are at variance with the instructor's intentions. Reports from students of their judgment of the worth of their learning in college might call attention to a number of problems of which many faculty members seem to be unaware.

Psychologists have been at work for many years trying to develop a systematic and all-inclusive theory of learning.² This is a comprehensive task which involves several conceptual dimensions. It is not uncommon for the assertion to be made that a particular type of general-education program is consistent with one systematic point of view toward the psychology of learning and is inconsistent with other points of view. This position is rarely sustained by careful analysis. The claim overlooks not only the different interpretations of a "single" psychological system made by several of its advocates,³ but also the relationships among systems⁴ and the similarity of implications for practice of aspects of different systems.⁵ Actually, the expression, "learning theory," refers usually to a point of view toward, or emphasis upon, certain aspects of learning made popular through the writings of outstanding individual psychologists.

This comment does not deny the importance of theorizing about the learning process nor the fact that specific educational practices often imply different conceptions of learning. While it is generally true, as is noted below, that the "instrumentalists" writing about general education are more conversant with modern psychological literature, no attempt will be made in this chapter to show that any of the

² See the reference by Hilgard (10) in the bibliography for a statement of various learning theories.

³ See the statements by Guthrie and Hall on conditioning, Gates and Sandiford on connectionism, and Hartman and Lewin on field theory, in reference 18. Gates writes, "There are so many varieties in every 'school' that some formulations of different 'schools' are more alike than the extremes within any one."

⁴ See the statement by T. R. McConnell, entitled, "Reconciliation of Learning Theories," in reference 18.

⁵ See Gates (18:164), for a statement of the similarity in educational implications of the "organismic" and the "connectionistic" points of view.

varieties of college general-education program rests upon a system of postulates and hypotheses characteristic of a theory of learning.

VARIATIONS IN ATTENTION GIVEN TO LEARNING PHENOMENA

Among the authors who advocate various approaches to general education, there are interesting differences in the amount of attention given to modern psychological literature about learning. The groups Taylor refers to as rationalists and neo-humanists have little to say about learning, as such. *Liberal Education*, by Van Doren (22), includes no protracted discussion of the psychology of learning. None of the essays in Hutchins' *Education for Freedom* (12), *No Friendly Voice* (14), or *The Higher Learning in America* (13), is devoted to a consideration of learning problems. The Harvard Report (7), *A College Program in Action* (4) by the Columbia College Faculty, and *Liberal Education Re-examined* (8) by Greene and others, include little more than casual reference to the nature of the learning process.

This failure by the authors cited to concern themselves with recent facts and speculation about learning tempts the reader to conclude either that these advocates of specific types of general-education programs are not familiar with the writings of Freud, Koehler, Thorndike, or Lewin — to mention but a few — or that they have examined this literature and have concluded that it makes no contribution of any importance to the development of general-education programs. Hutchins implies that the second of these conclusions may be nearer the truth. He contends that "method" — which is largely derived from conceptions about the psychology of learning — should be considered quite apart from the curriculum of general education. He writes, "Let us agree upon content if we can and have faith that the technological genius of America will solve the problem of communication" (13:61).

The instrumentalists who are interested in general education do not make this sharp distinction between content and method. They imply that the two are, in many respects, inseparable and, consequently, devote much attention to psychology and particularly to the psychology of learning. The two volumes by the Sarah Lawrence College faculty — *Emotional Factors in Learning* (16) and *Psychology for Individual Education* (17) — develop at length the implications for general education of what is known about the way young people learn. Similarly, the volumes by Henderson (9) and Spafford (20), as well as *A Design for General Education* (5), devote a great deal of attention to the psychology of learning as an integral part of all recommendations regarding general education.

SEQUENCE OF EVENTS IN LEARNING

A brief discussion of the sequence of events in the learning process must be highly selective.⁶ All that is attempted in the next few paragraphs is the establishment of some psychological frame of reference for considering the various types of general-education programs. This has resulted in an emphasis upon learning that is "intentional." Presumably, the major function of higher education is to facilitate the development of persons who *want* to learn, to change, to "improve themselves." Much that is learned in college is not, of course, intentional in the sense that the learner knows clearly what he wants to become and works at it. Often the most significant experiences are altogether apart from classes or assignments or anything else that the college as an institution intends to teach or the student intends to learn.

Whether learning is intentional or otherwise, it is initiated by some tension or imbalance or dissatisfaction on the part of the learner. He finds himself in a state of affairs that does not please him. He is out of equilibrium, so to speak. His wants are not being satisfied in his view. This disequilibrium, or dissatisfaction, initiates not only learning but all behavior.

One important aspect of this very brief comment on motivation is that behavior is initiated as a result of the dissatisfaction of the behaving individual. He does not necessarily move about or seek better things or situations merely because others are dissatisfied with him unless this dissatisfaction of others affects his own perceptions. Students go to a college because, all things considered, other places and other activities about which they know or with which they have had experience leave them relatively dissatisfied and discontented in comparison with what they believe the college will provide.

A second condition for learning is the perception or conception of some goal, some condition, some state of affairs, which, if achieved, will satisfy, or give promise of more nearly satisfying, the individual's wants and consequently will tend to reduce or eliminate his dissatisfaction. The perception of this better state of affairs, this goal situation, varies greatly in definiteness from time to time and from learner to learner. While learning is certainly facilitated by clarity of goal perception, much behavior results from little more than a vague feeling of dissatisfaction which provokes activity that is goal-oriented in a general sense only. Many college students, for example, are either in-

⁶ For a more comprehensive statement see Hilgard (10).

articulate or ambiguous when asked to state what they hope to gain from "the pursuit of the higher learning."

The mere conception of a goal — of a better state of affairs — does not necessarily imply that learning will take place. In many life situations we can achieve our goals or proceed directly toward these better states of affairs without having to learn or to change. We already know what to do to satisfy this or that specific want. Consequently, a third condition necessary for learning is the existence of some problem, some obstacle, some difficulty, that precludes achieving what we want directly and immediately. Learning implies changes in behavior, and these changes are a consequence of attempts to overcome difficulties, to get around obstacles, to deal with problems. The individual realizes that he cannot get something he wants because there may be information that he does not know and must learn, or certain skills that he cannot perform and must acquire, or certain attitudes and points of view or feelings that are inadequate and must be changed. The college student who wants a college degree will spend many hours improving his knowledge of foreign languages or his knowledge of history, if he recognizes that these "improvements" (changes) must be achieved in order to get the degree.

The dissatisfaction, the goal, and the difficulty or problem set the stage for learning. In order to cope with the obstacle that stands between him and the goal he wants to achieve, the individual sets out to acquire, to make part of himself, whatever he thinks is necessary. If he is somewhat deliberative, he may first examine his past experience in analogous situations to see what he has already learned that may help him deal more adequately with a present or future problematic situation. If the past experiences do not provide him with what is needed, he sets out to learn whatever he thinks he must.

SOME GENERALIZATIONS ABOUT LEARNING

This short description of the sequence of events in learning will probably provide slight help to anyone interested in making a psychological analysis of college programs unless certain implications are singled out and elaborated. As these implications are developed in the following pages, the extent to which they seem to be recognized and acted upon by advocates of the various programs of general education is noted through the use of quotations from books and articles. These quotations represent the convictions of the authors at a particular time and in the context of a particular argument. As experience with a variety of general-education programs accumulates, the points of view

and rationalizations and convictions of their advocates frequently change. Hence, an attempt has been made not only to quote but to select for quotation statements which appear to be consistent with the author's general point of view.

Motivation

People learn in order to reach goals or achieve values that are of personal worth to them. The variety of the goals toward which individuals strive, and which require learning for their attainment, is great. One person may learn difficult skills and understandings and change his attitudes because he wants to be a medical missionary, another because he wants to operate a beauty shop. One individual may learn in order to become a philosopher, another because he wants to be a research chemist. Be these goals as various as they are, the learning is undertaken because of purposes that are significant to the individual himself. In order to achieve these goals, he seeks experiences that he believes will enable him to learn to do what he must in order to become a medical missionary, a beauty shop operator, a philosopher, or a research chemist.

The intimate and personal nature of motivation is overlooked in much of the writing on general education, particularly by the authors who advocate a prescribed curriculum. Instead of directing some attention to what it is that students want and in respect to which they are willing to learn, a general education is described which someone else believes students *ought* to have. Hutchins says, for example, "One objection to it [his recommendation for a general-education curriculum] may be that the students will not like it, which is, as we have seen, irrelevant" (13: 86). He believes that youth are too inexperienced to know what they need. Van Doren agrees: "Young men have not lived long enough to know why temperance and wisdom are good" (22: 60). Wiser and more mature people — the professors, for example — must decide what should be learned and proceed to teach it. This position does not imply a failure to recognize the role of motivation in learning but rests upon a tacit assumption that college students should and can be made to take the word of their elders as to what the program of studies should be and that they will get to work at it. Motivation becomes a problem of getting students to see that what someone else has decided they should learn is worth learning.

A different point of view is made explicit in these quotations: "The interest of the student is the key to stimulating and directing his thinking" (9:67). "If instruction is to be most effective, the individual

must be distinguished from the mass and the instruction must reach him in terms significant to him in his own life" (9: 165). The emphasis here is upon starting with goals and wants and needs that are directive of the student's present behavior. This must be done in any event, but there is the further contention that students' general-education experiences, as provided by the college, must, in the view of the student, be reasonably and sensibly and clearly related to his own needs and goals.

These contrasting views regarding the relationship that should exist between the student's perception of his needs and the general-education experiences provided by the college have interesting practical consequences. In the college with the prescribed general-education program, much administrative and faculty ingenuity is usually directed to developing ways and means of increasing the assurance that students will learn, even though what is being learned makes, at the time, little difference to them. This ingenuity has resulted in attempts to motivate student learnings that are both intrinsic and extrinsic. The former is represented by certain kinds of survey and orientation courses, improved educational counseling, the use of small discussion groups, and faculty conferences planned to help the student see the relation between his own needs and the prescribed course of study. Methods of increasing motivation that are more clearly extrinsic are graduation requirements, course prerequisites, honors convocations, dean's lists, honorary fraternities, probation practices, eligibility requirements for extra-curriculum participation, competition among organizations for grade-point averages, and fraternity and sorority initiation requirements. This is by no means an exhaustive list of the techniques that are used to relate purposes that students want to achieve because of what seems to them to be their inherent worth to the curriculum experiences deemed most worthy by the college faculty.

As is true in discussions about education at all levels, the indiscriminate use of words like "purposes," "interests," "wants," and "needs" confuses the reader of college-education literature. A distinction that seems crucial psychologically must be made between "wants" and "interests" on the one hand and "needs" on the other. Whenever the word "need" is used, reference is to what a student *should* learn and implies some normative convictions. This seems to be recognized by most of the authors of books and articles on general education. "So far as can be seen, there is no way of determining the 'needs' of anybody without assuming some goal toward which we are striving" (8: 82). "A need in education is any want, absence, or lack whose fulfillment is a necessary condition for the achievement of a desirable end"

(11: 144). A student may want to spend all of his time reading poetry. He may "need," however, to learn more about American history. This statement of need implies the kind of person someone believes the student should become.

It is a matter of common observation that needs are frequently perceived differently by students and by faculty members. One reason is the existence of a full generation of difference in age, which becomes increasingly significant as cultural change accelerates. Another reason for the disparity between student needs as viewed by the faculty and by the students themselves has to do with timing. The prescribed program, in the degree that it recognizes student needs, rests on the assumption that the best way to meet the needs of all is to provide everyone with experiences (courses) in a fixed sequence, and usually within the same time limits. This practice is inconsistent with what is known about the great variations among students in respect to their needs, no matter how defined, and their learning rates.

One of the major differences between the instrumentalists and the other two groups advocating contrasting types of general education is the importance attached to the student's interests and perception of his own needs. Messrs. Van Doren, Hutchins, Greene, and others, as well as the Harvard and Columbia College statements, while contending or implying that the college exists for the student, make no provision for the students to have much to say about the nature of their general education, once they have chosen their college. There is much stress by these authors upon a program of study that is required of all. This is a somewhat typical quotation: "The search for a curriculum is the search for one that is worthy to be uniform and universal" (22: 110). After making this recommendation, Van Doren suspects that students may not see much relationship between their own interests and concerns and this "universal curriculum," which disposes him to agree with De Tocqueville that, "In the present age, the human mind must be coerced into theoretical studies" (22: 132).

Mr. Hutchins, basing his argument on what he believes will provide the best training for the mind and rejecting "the sporadic, spontaneous interest . . . of undergraduates" (13:71) as irrelevant, argues for a general education based upon "a course of study consisting of the greatest books of the Western world and the arts of reading, writing, thinking, and speaking, together with mathematics, the best exemplar of the processes of human reason" (13: 85). Apparently, if students do not "like" or are not interested in this type of general education, they need not attend the college.

If a "universal" program of general education is designed primarily to produce "the ideal man" (22:99), the relationship of this program to the existing wants and self-perceived needs of many students may be so remote that they will not choose to pursue the general education. When the college tries to force them to, many students, in the words of Lewin, "leave the field." This does not necessarily mean, leave the college. On many campuses, considerable recognition is given those resourceful students who have learned and can teach others how to stay in college without meeting what the faculty stipulates as prerequisites for staying in college.

As has been stated above, the educators whom Taylor calls "instrumentalists" seem to regard the interests of students as being of great importance. When writing about education at the college level, they express the belief that a general education should result, in large part at least, from joint faculty-student planning. Spafford, describing the General College at the University of Minnesota, writes: "From the point of view of the student, his curriculum is his own, planned jointly by him and the college staff according to his needs and interests" (20:23). Henderson represents the same point of view when he writes, "If instruction is to be most effective . . . it must reach [the student] in terms significant to him in his own life" (9:165). In order to help the student bridge the gap between his interests and his needs, it is insisted that "counselling on educational, vocational, personal, and social problems is an important form of education" (5:13).

The fact that learning results from attempts on the part of the learner to achieve goals that are desired by him has pervasive implications. These implications are frequently overlooked unless a careful analysis of the total learning situation is made. Many college faculty members cite cases of students who studied and "learned" history, even though there was every reason to believe that the student had no interest in the subject. Without denying the reality of these observations, these two questions should be considered: "Why was the history learned?" and "What else besides history was learned?" The following series of statements may imply one of several answers to the first question: (a) I enjoy college life and want to continue to enjoy it. (b) I can't stay around unless I get a passing grade in history. (c) It's too risky to cheat on an examination. (d) I'd better do some studying to get the grade to stay in college.

The second question, "What kinds of learning other than historical information may be involved in the total situation?" is infrequently raised. College faculties are rather generally unaware of the undesir-

able attitudes and work methods that students may acquire incidentally, even though examinations reveal that they have learned enough subject matter to satisfy course requirements. Teachers who profess to a single-minded concern with what they call "intellectual development" often claim that they cannot be responsible for "nonacademic" learnings like attitudes and work habits.

Referring back to the rather roundabout motivations for learning history commented upon above, the point is that a student will learn some history if he recognizes that he must in order to satisfy his other wants. This illustration probably is a prototype explanation for much "learning" of college subject matter that is not considered by students to be significant. College life and college degrees are "valued" by young people for a number of reasons. The typical college culture, however, is so structured that these goals — the fascinating social activities and the economic or social worth of a degree — cannot be achieved without meeting certain explicit if varying standards of scholarship. Students who are motivated to attend college and engage in studies for such "extraneous" or "irrelevant" reasons — in the view of many faculties — are constantly in contest with the collegiate institution when they try to achieve their personal values as directly and forthrightly as possible. Unless they are policed and coerced in various ways, they will not engage wholeheartedly and beneficially in the activities for which the college faculty believes the institution exists.

The mere fact that a substantial group of students appears to be interested in and to benefit from a particular type of curriculum developed without any explicit attention to their interests is not here being contested. Young people of college age vary tremendously in their interests, their needs, their motivations, and their aspirations. Almost any conceivable type of general-education curriculum might interest and meet the needs of some students. This is particularly apt to be the case if the college has been active and successful in advertising its program and if the admissions policy is selective in respect to the constellation of abilities the program aims to develop. A college with a program of general education involving long periods of solitary study and soul searching in damp stone cubicles on a diet of bread and water might, if it advertised itself widely, attract a number of young men and women who felt at the time that this regimen represented exactly the sort of educational experience in which they were interested and from which they would benefit. A serious error in extrapolation is made, however, if it is claimed that because a certain curriculum attracts young men and women whose interests correspond with

the program's objective, this same program is, therefore, appropriate for all young people of college age who need a general education.

The Unity of Learning

An individual, throughout his experience and throughout his learning, reacts as a total, integrated person. He does not act and then feel and then conceptualize. Nor does he feel and then act and then generalize. This observation does not deny that particular experiences may involve reactions that are primarily (a) of a gross physical sort, such as throwing a discus, or (b) intellectual, such as working problems in mathematics, or (c) affective, such as enjoying a symphony. The point is that these "types" of activity are abstractions. At one and the same time and in greater or lesser degree, in everything a college student does, he is physically active, he generalizes and interprets and conceptualizes, and he evaluates — that is, he feels affirmatively or negatively about what he is doing.

Because learning involves the whole individual, in the sense denoted by the preceding paragraph, a psychologist regards with some skepticism a long list of general-education objectives falling under headings like "Knowledge and Understanding," "Skills and Abilities," "Attitudes and Appreciations" (5: 114f.). This sort of analysis of outcomes leads easily to the misunderstanding that one can teach knowledge and understanding in isolation, skills and abilities in isolation, and attitudes and appreciations in isolation.

A somewhat different and seemingly paradoxical way of describing this same "unity of learning" is to call attention to the fact that learning is multiple. The college student in a literature class who is being taught about Shakespeare is also acquiring reading skills as well as attitudes toward Shakespeare, his instructor, his fellow students, and other aspects of his experience. Because he may need to "pass" the course in order to stay in school or to "major" in English, both of which he wants to do, he will memorize long selections and answer many questions about characters and plot and Elizabethan culture. The instructor is not often aware that at the same time the student may be making firm resolves never to read Shakespeare again or to read anything called "great literature" if it can be avoided. All of these kinds of learning must be taken into account before any over-all judgment regarding the worth of a college program of general education can be made.

One of the basic characteristics of learning — and a characteristic that is frequently overlooked by persons interested primarily in intel-

lectual development — is the “feeling” aspect. We like or dislike, accept or reject, feel pleased or displeased, in greater or lesser degree, with every experience we have. Whatever is learned about a person, a group of persons, an object, a practice, an institution, or an idea is accompanied by an evaluation of it. Any sharp distinction between intellectual and emotional experience is unrealistic.⁷

It is in connection with this separation of the various so-called types of learning — intellectual, physical, and attitudinal — that another difference of opinion exists between the two most widely separated parties to the general-education controversy. Hutchins writes with asperity about the education of the “whole man”: “Of all the meaningless phrases in education, this is the prize” (12: 36f.). His insistence that “clearly the object of higher education is the training of the mind” (14: 130 *passim*) is well known. Similarly, Van Doren, admitting a “debt to the conversation and writings of Scott Buchanan, Dean of St. John’s College in Annapolis, greater than even he will recognize,” (22: ix) contends that “the conscious business of education is with the intellect” (22: 62).

The position of the educators who oppose this separation of thinking-acting-feeling is more nearly in harmony with modern experimental and speculative psychology. The authors of *Building a Curriculum for General Education* write, “The program of the general college is built on the philosophy that education should help people live richly in all of the relationships of life” (20:1). In *A Design for General Education* this statement appears: “Attitudes and appreciations . . . are integral aspects of the learning process, and they play a powerful role in the extent to which the individual carries knowledge and understanding over into appropriate behavior” (5: 9). The book, *Emotional Factors in Learning* (16), by Murphy and Ladd of the Sarah Lawrence College faculty, was written primarily to demonstrate the inseparability of acting-thinking-feeling processes.

Most of the authors who write about general education attend seriously to the contribution this education should make to the student’s beliefs, ideals, values, and attitudes, which are, of course, heavily weighted with the affective aspect of experience. There is frequently, however, no clear differentiation between learning *about* values and

⁷ See “Emotions and Memory,” by David Rapaport. Baltimore: Williams & Wilkins, 1942. Rapaport concludes, after a careful review of a large number of theoretical statements and research studies, that the learner’s feelings about what he is learning have a significant bearing upon his ability to recall or recognize at a later time what he had learned.

learning a commitment to values. The assumption, especially for the rationalists and neo-humanists, seems to be that verbal learning *about* the good life will result in leading the good life. The authors of the Harvard Report state, not with great confidence, however, that "the college . . . will trust to the Socratic dictum that knowledge of the good will lead to a commitment to the good" (7:72). This assertion is followed, twenty pages later, by a sentence that reflects a somewhat clearer conception of the psychological realities: "If some students will learn of democracy, for instance, partly through reading, all — and the less gifted especially — must learn of it also through action and by example" (7:95). *A Design for General Education* makes clear at least a tentative acceptance of the principle that knowledge is not a sufficient guarantee of appropriate behavior when the authors suggest that "effective preparation for citizenship may be as much a function of actual experience in co-operative social enterprise as it is of reading about civic affairs" (5:13).

The belief that learning about desirable practices will automatically lead to commitment to them is denied by a large amount of research literature describing the relationship between verbal knowledge about an institution or practice and its value status for the person acquiring the knowledge. A close relationship cannot be assumed. Learning information about Negroes, for example, does not necessarily affect the attitude of the learner toward Negroes. Similarly, learning a great deal of verbal information about United States history is no guarantee of patriotism or good citizenship.

Because learning is multiple, because feelings as well as ideas and skills are changed by a college general education, a comprehensive program of evaluation involves measuring many aspects of student growth. This is usually the practice, or at least the stated aspiration, in colleges whose programs are student-centered, although measuring the development of attitudes and appreciations is very difficult. In general-education programs where the emphasis is upon "subject-matter content to be learned" the tests and examinations may be most ingenious, but they are usually verbal and attempt to assay what is thought to be intellectual development only.

There is another sense in which the term "unity" is used in discussions of general education. The argument in this section up to this point calls attention to the fact that the college student is a single organism, reacting as a totality to his learning experience. His mind, glands, and muscles are simultaneously active, so to speak. But "unity" has also been used to describe the extent to which the various

parts of a general education are related. Almost without exception, all authors of books or articles about collegiate general education are concerned about this problem of "unity." They would agree with this statement in the Harvard Report: "In recent times . . . the question of unity has become insistent" (7:43). Those who advocate a prescribed program of general education are especially attentive to the importance of system and order. They seem to have a decided aversion to anything that impresses them as being chaotic. The occasional favorable reference to President Elliot's contribution to higher education is usually tempered immediately by citing the chaos which was a result of his "elective system."

The desirability of unity and coherence in a program of education is not contested by a psychologist. He is greatly interested, however, in the assumptions lying back of recommendations for programs that presumably will result in these desirable qualities. The advocates of a prescribed program of study usually act on the assumption that "taking" well-ordered and carefully organized courses will result in a well-organized and unified education. This position overlooks the fact that in the last analysis it is the way the learner organizes his own experience that counts rather than the organization imposed by other people upon the subject matter the student learns. "The only place that organization has any ultimate significance is in the mind of the student; its significance is in the unique organization which is there established" (6:314).

The chief point to the argument for coherence and unity in respect to a general-education curriculum, while rarely made explicit, is the belief that this order and coherence will enhance availability. In other words, the "well-organized mind" is the mind that can more quickly identify and locate and make available whatever is needed by a problematic situation. A "chaotic" education is one that is confused in the sense that it cannot be drawn upon, so to speak, and used.

Many ideas have been advanced as to the best way to give reasonable assurance that a program of general education will have coherence and unity in integration. Eurich has enumerated and described the following seven methods of integration:

Some would achieve unity by having all students study basic areas of subject matter in order to give them a common ground for understanding each other. Some think of unity as it is represented in great books that have stood the test of time and the attacks of critics. Some keep searching for first principles, great truths that hold at all times and in all places; if we could only discover these, they argue, unity could readily be arrived at through a study of

them. Some would center general education about the student's individual and personal problems, his adjustments and maladjustments; for, they say, integration is not really achieved unless it takes place within the student. Some think of integration as growing out of a study and understanding of basic needs of the individual, such as food, shelter, clothing, sex or reproduction, and all the activities in which he must engage in order to satisfy these needs. Some are firmly convinced that the quest for unity can be satisfied only through an emphasis upon the relationship of the individual to society; upon the activities in which he engages, such as observation and communication, in order to contribute to and to be fully a part of a social group. To be sure, these points of unity are not mutually exclusive. They represent centers of interest. They reveal contrasting positions as well as the dominant quest" (6:7).

That whatever unity and coherence obtain are within the experience of the individual would probably not be denied by any of the groups advocating different programs of general education. The argument would center upon the extent to which a coherent and well-ordered experience results from structuring in advance the sequence and content of the student's college work. Van Doren claims that there is a best content and organization: "There must be a natural order of learning. . . . When education means anything fundamental . . . it refers to an orderly ascent of stairs" (22: 87). This point of view implies that, regardless of the background, interests, and needs of the students, it will be possible to discover a sequence of studies that is better than any other for providing a general education.

The authors, who pay more attention to the persistent and emerging needs of students, believe that the experiences which provide a fine general education for one group of students might not be best for other students:

We have learned that a student's responses to particular materials or ways of working are never safely considered apart from her class and college situation; her response to the class group, to the teacher, to college in general; the security or stimulus they give her, the inhibitions or resistance they create, may be more important in determining her response to specific assignments than the specific questions themselves or her ability to handle the techniques involved (17: 17).

Individual Differences

The fact that college students differ widely in the goals they seek, the methods they use to achieve these goals, the meaning derived from classroom experiences, and the facility with which they learn was not discovered by a psychologist. Every faculty member who looks around is witness to the uniqueness of each of his students. The past

fifty years of experimental psychology, involving college students because of their availability clear out of proportion to their representativeness of the general population, have resulted in much objective information about the amount of these differences and their interrelations. It is known, for example, that the students in the top fourth of a class in reading speed or comprehension are usually three times as competent as those in the bottom fourth. The implications of this type of heterogeneity for assignments, examinations, and other aspects of the college curriculum are deserving of careful attention.

The existence of large differences among college students is recognized by advocates of all types of general-education programs. As might be expected, those curriculums that are designed primarily to promote intellectual development specifically take into account only those differences which are considered to be intellectual. Hutchins, advocating a prescribed curriculum and comprehensive examinations taken by all students to measure the degree to which they have benefited from this curriculum, recommends that, "Allowance for individual differences should be provided for by abolishing all requirements except the examinations and permitting the student to take them whenever in his opinion he is ready to do so" (13: 72).

In general, those educators who insist upon a prescribed general-education course of studies agree with Hutchins that the time needed to complete this course of studies can vary, and by this method individual differences are taken into account. This group, too, anticipates that the best general education will reduce the extent of individual differences substantially — the ultimate end of education being the "ideal" man (12: 104).

One of the psychological limitations in this contention, that "the same" prescribed general education will make students less different, is a failure to realize that the meaning of an experience is highly private and personal. "A great book is hardly a great book unless it is a great experience to the student reading it" (16: 4). Whatever a student hears, reacts to, and remembers from a college lecture, for example, depends upon his own unique perception of the total situation and its requirements.

This privacy of meaning does not necessarily argue against a prescribed curriculum. It only questions the implication that a fixed curriculum will make all students become more and more like the "ideal man." The most that can be said at the present time about the effects of schooling or training on the range of individual differences is that the research data can be interpreted to imply either that in-

creased education makes for greater homogeneity or for greater heterogeneity. Relatively few psychologists are studying this problem now, although a large number did fifteen or twenty years ago.

While the content-centered general-education program frequently makes allowances for intellectual differences among students, those programs which place greater stress upon the student's total development try to take into account many kinds of differences. Writing about the types of questions an instructor should ask about a student in order to teach effectively, the authors of *Emotional Factors in Learning* suggest queries like these:

What have I learned about the kind of person she is and is likely to become? What role or roles is she likely to play in the dynamically changing years ahead? How do the interests and goals she expressed at this point fit with her kind of person? Can her probable ability sustain them? Will these interests or goals prove sufficient challenge to stimulate her growth? What aspects of her personality can be counted on to keep her in the pursuit of these goals, and what obstacles is she likely to confront within herself? What can the college contribute to the fullest development of her strengths and the overcoming of some of her weaknesses? What materials, methods of work, and personalities in the college are likely to be most helpful to her development? (16: 16)

Answers to these questions, to the degree that answers can be procured, result in attempts to provide different kinds of college experiences for different kinds of students. "Because we recognize the importance of . . . individual differences, we do not attempt to plan any single required course in any single field which all students must take" (17: vi). A more specific implication of this policy is reported as follows: "Among tight, over-controlled, rigid students, some have found release in art, some in music, some in creative writing, some in working with children or other groups of people. We've found that the same teacher could be very helpful to one student, useless to another" (16: 14).

Van Doren's comment on the point of view toward curriculum and teaching implied in these Sarah Lawrence College practices would probably be that "a system of education . . . which broods in public about the metaphysics of student life has lost its aim" (22: 108).

Spafford and her University of Minnesota collaborators suggest the necessity for adapting the curriculum to the various differences among students:

Students in the General College, like college students in general, vary greatly in their interests and needs, their educational and vocational goals,

their academic abilities, and the amount of time they spend in further schooling. . . . It is for all of these students that the General College curriculum has been planned (20:3).

Whenever a college tries to adapt its program and instructional methods to individuals, the need for continuing studies of the student body become clear.⁸ "The better the college knows its students, the better the educational job it can do, for planning and doing the job depend largely upon understanding the material there is to work on" (9:55).

Supplementing these studies of the student body, adaptation of a general-education curriculum to the needs of students requires that much time be spent in counseling and guidance activities. And this counseling is an integral part of the general-education program rather than something necessary but extraneous to the real responsibility of the college.

Transfer of Training

All programs of general education are conceived of as preparatory and hence assume transfer of training. By this is meant that what the student learns in college is assumed to be applicable and helpful to him in subsequent college and noncollege situations. This statement is not controversial. Differences of opinion are numerous, however, concerning those characteristics of a learning experience that increase the likelihood that whatever is learned will be available when it is needed.

Few learning problems have been studied more assiduously by educational psychologists than transfer of training.⁹ Early in this century transfer was recognized to be of central importance to formal education as studies by Thorndike and others questioned the prevailing "faculty psychology." Many investigations have been published reporting the "transfer" from Latin to English, from one foreign language to another or from the study of science to scientific thinking in social situations.

Studies designed to measure transfer, and the factors influencing transfer, are less common now than they were twenty-five years ago, primarily because psychologists have reached a substantial consensus

⁸ For an account of the way this was done at the University of Minnesota's General College, see Cornelia T. Williams, *Those We Teach*. Minneapolis: University of Minnesota Press, 1943.

⁹ For a good summary of transfer studies of most significance to formal education see S. L. Pressey and Francis P. Robinson, *Psychology and the New Education*, chaps. xvii and xviii. New York: Harper & Bros., 1944 (revised).

that: (a) in almost all instances investigated there was clear-cut evidence of positive transfer,¹⁰ and (b) the amount of transfer was a function of the similarities perceived by the learner between the situations involved.

The dependence of transfer upon similarities between the two or more situations involved has reference to "content" as well as method of work. For example, whatever the study of Latin may contribute to facility in English results not only from the similarity in word form between the two languages but also because the methods employed in studying Latin may be in many respects similar to the methods employed in studying English. Similarly the scientific method, if learned and valued, represents a procedure that is applicable to the solution of a wide variety of problems.

As has been implied, the various types of general-education programs advocated for college students are not different because of the fact that one rests its case on transfer and the other denies that transfer occurs. At the root of the problem are different conceptions of the mind. Those educators who conceive of general education as providing intellectual training primarily seem to believe that a mental faculty, if trained, can be used with equal facility in a wide variety of situations. "An intellect properly disciplined is an intellect able to operate well in all fields" (13: 63). Certain "subjects" are considered to be more effective for providing this intellectual training than others. "Correctness in thinking may be more directly and impressively taught through mathematics than in any other way" (13: 84). Van Doren contends that, "Even on the old terms, the theory [of formal discipline] made more sense than it is given credit for" (22: 121).

Few modern experimental psychologists would share these beliefs about formal discipline. They would suggest that all of the transfer effects possible should be striven for by calling attention to similarities and emphasizing generalizations, but that the more closely an education can resemble the situations in which the consequences of the education will be used the more adequate that education will be. This claim, "There is no better practice in reading or in writing English than translation, provided the translator knows the other language sufficiently well" (7: 120), is contradicted by a number of experimental studies. These imply that there is no better practice in reading or

¹⁰ In some cases, Learning Experience "A" (the study of French) interfered with Learning Experience "B" (the study of Spanish), in which event the phenomenon was called negative transfer or, by some psychologists, retroactive inhibition.

writing English than continued thoughtful practice in reading or writing English.

In general, it can be said that the "student-centered" programs are based upon a clearer conception of the importance of providing learning experiences that are as similar as possible to the situations in which what has been learned will be used. If, for example, the aim is to help students think critically about social science data, they will have college experiences with such data in which thinking critically about them will help the students achieve purposes that are significant to the students. This position does not deny the possibility that training in logic or mathematics will contribute to the ability to think critically about social science problems. The question is not, "Are students in college having experiences that result in learnings which carry over to some degree and provide some help in other problematic situations in college and afterward?" The crucial question is, "Are these students learning lessons that give every promise of being maximally useful in college and afterward?"

An interesting transfer problem is implied in the relationships that exist between the stated aims of a general-education program and the experiences provided students by the curriculum. If the college contends that one of its general-education objectives is "good citizenship" and if this vague objective is broken down into somewhat specific behaviors that define good citizenship, the assumption is that whatever students learn in college will carry over or transfer to situations in which good citizenship is appropriate. It is not easy to look for consistency between the curriculum activities in which students engage and the objectives to which these activities are supposed to contribute. One reason for this difficulty is that there are at least three ways to get an answer to the question, "What is the college trying to do to students?" One is to examine the college catalogue. Frequently, this is not rewarding. A more adequate description of what the college is consciously teaching is revealed by the examinations given. If a program of general education stresses all-round development in its enumeration of objectives and pays particular attention to emotional growth and the importance of behavioral outcomes, it is reasonable to expect that a description of the evaluation program in this college would include a great variety of procedures for getting data describing emotional development and the achievement of behavioral outcomes. If a college makes no attempt to find out whether or not it has been successful in achieving objectives that it professes to think

important, it is reasonable to assume that little is known about the extent to which these objectives are being achieved.

It is difficult to develop measuring instruments to evaluate the success with which a college achieves its purposes if they are broadly defined. Spafford seems to recognize this difficulty when she writes:

Measurement in the General College has been largely through the use of new-type examinations set up to measure knowledge of facts and principles in solving problems and the ability to interpret new material. . . . To be consistent with its philosophy, the college should measure learning in the long run in terms of changes in attitudes and ideals, appreciations and interests, and skills and techniques, and teachers have tried increasingly to do so (20: 31).

The nature of the efforts made at Minnesota to measure these attitudinal changes are not described in detail.

A third method of determining the kind and quality of student learning in a general-education program is to observe as carefully as possible what the young people are doing and are feeling successful about and are desirous of doing better. A psychologist examining a program of general education is disposed to infer the aims that are being achieved from observations of what the students are doing and how they feel about it. The purposes inferred from student activity are frequently remote from the purposes described by the faculty. One of the latter, for example, may be "To Practice and Understand Good Health Habits." This is, of course, a defensible objective, but a psychologist would be interested in the kind of experience the student has in a general-education program in order that this objective might be achieved. If the experiences provide primarily for learning information *about* health practices and health hazards, and if the students feel rewarded for succeeding in this activity, they are acquiring a greater verbal familiarity with health hazards and practices. This, of course, is not the objective as described, and the person who assumes that an understanding of the nature and importance of certain health practices will lead to engaging in these practices is mistaken.

CONCLUSION

The readers of this yearbook are interested primarily in programs of general education at the collegiate level. Even though this is the case, much can be learned from efforts now being made by secondary-school people to provide a defensible general education for high-school-age boys and girls. These high-school programs usually reflect a rather realistic understanding of the way boys and girls learn. One

reason for this is that the relatively nonselective character of the secondary-school population has literally forced those who are responsible for the high-school curriculum to recognize and make adaptations for great individual differences. Another reason is the lesser influence at the secondary-school level of traditions that associate education with leisure—the gentlemanly tradition—or with the belief that education should contribute primarily to intellectual development and put great stress upon verbal activity. Anyone who is interested in looking further for implications of the psychology of learning for general education would benefit from reading the references numbered 1, 3, 15, and 21 at the end of this chapter.

For many years, the relationship between the secondary school and the college was unilateral in the sense that the college had a strong influence upon high-school practices, but the reverse was barely perceptible. College-faculty members in general do not look to the high school for examples of good curriculum or methodological practices. There is reason to believe, however, that at the present time much of the best thinking about general education at the college level—particularly by the group Taylor calls the “instrumentalists”—has been tested and probably had its origin in the secondary schools. In those parts of the country where institutions of higher education do not dominate the high schools by means of college-admission requirements, secondary-school teachers and supervisors and administrators have experimented with a diversity of approaches and conceptions of the most desirable general education for high-school pupils.¹¹ Many of these experiments have significant implications for general education at the college level.

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CHAPTER IV

SOCIAL FOUNDATIONS OF GENERAL EDUCATION

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INTRODUCTION

Putting a large proportion of young people into an institution of formal education during their adolescence is a revolutionary procedure. In fact, it has been tried only in North America and Northern Europe, and during the nineteenth and twentieth centuries. The first step in this direction was accomplished in the nineteenth century, when children were put into schools and kept there up to the ages of twelve or fourteen. The twentieth century has seen the next step — the extension of general education to ages sixteen and eighteen — with the beginnings, in the U.S.A., of general education for eighteen- to twenty-year-olds. By 1940, 15 per cent of American youth were entering post-high-school institutions. At present there is talk of doubling or trebling that number.

Underlying these changes in the lives of youth are great, sweeping social forces. In 1950 there were as many college students as there were horses in the U.S.A., about two million of each. But the number of college students had multiplied fourfold since 1915, while the number of horses had fallen away to one-tenth of the 1915 number. The same social forces which reduced the number of horses increased the number of college students. Technological development reduced the need for brute power but demanded more trained man power. Between 1880 and 1940 the proportion of male professional workers doubled, while the proportion of agricultural workers was cut to less than half. Juvenile labor, being untrained, was less in demand.

At the same time increases in real incomes enabled a vastly greater number of parents to support their adolescent children in school and college. Thus the high school and college became the principal avenue

leading to socioeconomic success. The enormous increase of enrolment in high school and college since 1900 is due almost entirely to economic factors, such ideological factors as the desire for "culture" and the wish for social advancement being largely derived from the basic economic phenomena.

Moreover, the democratic political ideology of the country harmonized with economic forces in requiring more education of more people. The societies of North America and North Europe became mass democracies, where each man's vote counted for as much as any other's. With the growth of organized labor the workers became more active politically. It became essential for the public welfare that civic knowledge, interest, and participation be spread widely among the public, and schools and colleges seemed suited for this purpose. The part of the world known to the average individual was greatly enlarged. Mass communication and world intercommunication through newspapers, radio, and cinema brought "information" to all and enormously complicated the political and economic issues to be decided through the ballot box. Meanwhile, the scope of government expanded to include more and more of the economic and material interests of people, thus making it worth their while in the narrow sense to become well-informed citizens.

The political unit expanded in size far beyond the limits thought desirable for the classic democracy — "no wider than the view of the watchman and the sound of the stentor's voice." To meet the political needs of the day it was necessary to enlarge the concept of "literacy" from the level of the 3 R's to the level of understanding of world politics and economics and their ethical implications, and to involve the individual citizen in these matters.

The expansion of formal education to include more years and more people has had three essential characteristics. These are:

- (1) Education has been recognized as a responsibility of the political community. Although individuals and voluntary religious and cultural organizations are free to conduct educational ventures, they must do so with the approval of the state, and the state sees to it that minimum standards of education are enforced.

- (2) Extension of education has been welcomed by the people. It has almost universally been considered a desirable thing — a mark of an improving society — when the amount and scope of education have been increased. There has been very little resistance to compulsory schooling by parents or children — they have generally welcomed it.

The reasons for such general approval of educational expansion have been mainly selfish, because of its usefulness in improving the economic and social status of the individual. But even the nonvocational, nonspecialized education which is meant by general education has been popular, partly because it was thought to improve the economic and social status of the individual, and partly because it was thought to improve his civic and cultural behavior.

(3) Expansion of education has brought with it the concept of "general education for all." The older notion of an educated elite which would carry the major civic and cultural burdens of society has been superseded. General education is to be free for all, at the secondary-school level, and to be fitted for all. At the college level, general education for only 15 per cent of the population is regarded as too little. The optimum fraction has not been agreed upon, though there is a tacit agreement that not more than half of the population is intellectually capable of profiting by formal, full-time general education beyond the age of eighteen.

BASIC AGREEMENTS

Although the American educational scene gives the impression of great diversity, and undoubtedly is more diversified at the college level than that of any other country, yet there is a wide area of basic agreement among educators as to the proper aims of general education.

There is general agreement on the following five basic aims:

1. To develop critical intelligence, capable of being applied in many fields.
2. To develop and improve moral character.
3. To develop and improve citizenship.
4. To create intellectual unity and communion of minds among as large a population as possible.
5. To equalize opportunity, as far as is possible through education, for individual economic and social improvement.

All of the leading educators and educational theorists can agree upon these aims, though they certainly disagree on the means for achieving the ends they desire. The extent of their agreement is indicated by the following quotations.

Sidney Hook, writing on the task of the educational system in a democracy says,

Its function is to serve as a common institutional ground in which are forged the attitudes of reasonableness, of scientific inquiry, and devotion to shared human values which must underlie all difference within a democratic culture if it is to survive. Where churches and sects and nations divide, and

men will always be divided, the schools can unite by becoming the temples and laboratories of a common democratic faith (4: 65).

Taylor (p. 43) says that the intention of the instrumentalist education is to make the student "an active element in the creative change of the society around him."

Robert M. Hutchins says, "The great problems of our time are the right use of leisure, the performance of the duties of citizenship, and the establishment of a community in this country and the world" (11: 369). He says that the college should help the students solve these problems. Further, he says, "Wisdom and goodness are the aim of higher education" (9: 23). "The basic function of the University is candid and intrepid thinking about fundamental issues. . . . Education is the deliberate attempt to form human character in terms of an ideal" (9: 104).

The Harvard Committee on General Education speaks of general education as "education for an informed responsible life in our society," and again defines general education as a term "used to indicate that part of a student's education which looks first of all to his life as a responsible human being and citizen" (3: 51).

Two Sarah Lawrence College faculty members refer to "the modern reality that colleges do not exist solely to breed scholars but to educate citizens" (14: 3).

The Faculty Committee of Columbia College, in evaluating the college program, say, "We want our students to know how important intellect is for the citizen of the world" (1: 90).

Algo D. Henderson, former president of Antioch College, says, "It [liberal education] is an education that tends to produce the liberal individual — the person who, because of his perception of history, his critical observation of contemporary society, and his understanding of social dynamics, helps to facilitate needed change in the world" (7: 5). He also speaks of equalizing opportunity through education: "The political leadership should be drawn from all ranks of society. Liberal education has been too much a class privilege" (7: 37).

However, there is real disagreement on method among these educators, even though they agree on their basic aims. An example of disagreement on method is given by the following statements of Mark Van Doren, who first agrees with his opponents that "Education is for all, and there can be no compromise with the proposition — A democracy that is interested in its future will give each of its members as much liberal education as he can take, nor will it let him

elect to miss that much because he is in a hurry to become something less than a man" (16: 30-31). Then he argues that the method of making good citizens is to make good men. "Democracy cannot survive a loss of faith that the best men will make the best citizens. It certainly cannot afford to educate men for citizenship, for efficiency, for use. Its only authority is reason, just as its only strength is criticism" (16: 38). Here Van Doren is stating the rationalist view that good citizenship will flow from an education that makes men generally good, rather than from a specific "training" for citizenship.

The aim to equalize opportunity through education is generally accepted. The President's Commission on Higher Education is especially vocal on this point. The Commission says, "By allowing the opportunity for higher education to depend so largely on the individual's economic status, we are not only denying to millions of young people their chance in life to which they are entitled; we are also depriving the Nation of a vast amount of potential leadership and potential social competence which it sorely needs" (8: I:29). Again, "Only an informed, thoughtful, tolerant people can maintain and develop a free society. Equal opportunity for education does not mean equal or identical education for all individuals. It means, rather, that education at all levels shall be available equally to every qualified person" (8: II:3).

These quotations give some idea of the variety of educators who hold common attitudes about certain basic aims of general education. The writer has not found any significant dissent among writers on education from this area of agreement. Such disagreement as exists with reference to these basic objectives is over means, not ends. For example, there is substantial disagreement between Robert Hutchins and Sidney Hook on the means of improving citizenship through education, but the two men agree that better citizenship should be an outcome of general education.

EDUCATION AS A SOCIAL PROCESS

Divergence about general education has come out clearly in the ways general education is seen as related to the society in which it takes place. The neo-humanists and instrumentalists tie education very closely into the social process. They believe that the content and method of general education should depend upon the particular society in which it takes place.

President Conant of Harvard presents a chapter on "Education

as a Social Process" in his book, *Education in a Divided World*. He says,

Education is a social process, our schools and colleges neither operate in empty space nor serve identical communities. . . . What may be a highly satisfactory curriculum for one group of pupils may be highly unsuitable for another. And the difference is often not due to discrepancies in the intellectual capacities of the students but to the social situation in which the boys and girls are placed (2: 48).

Conant sees the form and functions of education as part of the structure and action of a society. As society changes, education changes; as education changes, society changes. "The relation between the structure of our society and our educational system is reciprocal, of course" (2: 69). "Fluidity within the social structure, changing status from generation to generation, complexity of the social pattern, low visibility of the group differences — all these are desirable if we would have an industrial society composed of individuals who regard themselves as free" (2: 59). "If the American people want a more fluid society, we must plan our education accordingly" (2: 42).

Sidney Hook carries the same proposition of education as a function of a particular society to the extent of urging the use of education for promoting social and economic planning. He says, "Educators must move into the forefront of social and economic planning to represent an interest which is a pre-eminent public interest" (4: 62). "In a democracy, educators as a group have a greater opportunity to influence society, and therefore a greater responsibility for what they fail to do, than in any other political order" (4: 50). "The fundamental social problem of our culture — fundamental in the sense that it conditions a satisfactory solution of all other important social problems — is to defend and extend our democratic heritage of rights and freedoms in an industrial economy that can provide security for all" (4: 56).

Henderson, taking the same general position, says,

Education must . . . take its direction from an over-all hypothesis concerning what constitutes the best society. Tentatively, the over-all objective of society might be to enable each individual to achieve the fullest development of his own personality and life consonant with, and at the same time capturing for society as a whole, the maximum values which can be gained from group association and endeavor (7: 31).

The President's Commission on Higher Education says, "General education is liberal education with its matter and method shifted from

its original aristocratic intent to the service of democracy" (8:49).

The Harvard Committee on General Education deals explicitly with education as a function of society, on both the college and the high-school levels. The Committee says, "Education, like all society's prime needs, changes as society changes. Yet, since the general character of a culture changes more slowly and becomes mature more slowly still, if at all, there exist also relatively constant elements in education" (3:31). "The problem of general education is one of combining fixity of aim with diversity in application" (3:57). "The present diversity of instruction in the high school reflects dimly like a clouded mirror the diversity of our society itself, and it will not be adequate until it catches that image more exactly" (3:12).

There is, however, a vocal group who disagree with such a close connection between education and the society in which it occurs. These critics would use the term "presentism" to express their disapproval of concentrating so much of general education on problems of present-day society. Holding mainly the rationalist point of view in philosophy, they regard general education as something that should be relatively unchanging from one time to another, and from one individual to another. They expect education to influence society, but they want to insulate the educational process as far as possible from being influenced by the immediate social situation and its forces.

Hutchins has said this many times, in one way or another. He says,

I suggest that the heart of any course of study designed for the whole people will be, if education is rightly understood, the same at any time, in any place, under any political, social, or economic conditions. Even the administrative details are likely to be similar because all societies have genuine similarity (10:66).

Mark Van Doren quotes with approval the following from Mortimer Adler:

The question, "What is good education?" can be answered in two ways; either in terms of what is good for men at any time and place because they are men, or in terms of what is good for men considered only as members of a particular social or political order. The best society is the one in which the two answers are the same (16:42).

From this position, general education is seen as exerting leverage on present-day society and, at the same time, remaining somewhat aloof from present-day problems. Present-day problems are seen as ephemeral forms of permanent problems, and the ideal general education is seen as one that deals with permanent problems and with the

great ideas which have been developed to solve these problems. A good general education is expected to teach young people how to solve the problems of society, in whatever particular forms they may take, but is not to use the present-day forms of these problems as subjects for study in the curriculum. This position is held by the rationalists, while the neo-humanists and instrumentalists favor using the problems of present-day society as subject-matter for the curriculum.

The rationalist is inclined to accept the institutions of the society with the hope of improving them through the operation on them of the human intellect. For example, he hopes to improve the forms of government in the world by drawing up a constitution for a world government. To oversimplify his position but to preserve the kernel of his argument, he hopes to get better government by thinking about it freely and logically. He would conduct general education with respect to government by teaching students to think accurately about the timeless, changeless problems of government. He would not be especially concerned in his teaching about how one gets from the present situation of international anarchy to the desirable future situation of world order.

The instrumentalists, for whom John Dewey may stand in this connection, would expect the teacher with the student to become an active force for the experimental fashioning of world government, not having thought through the problem of what is a good form of world government, not believing that such a problem can be solved by thought alone, but absorbing themselves in the present situation and trying to work out better forms of government as they go along.

Alexander Meiklejohn seems to stand between these two groups, and may speak for the neo-humanists. The teacher, according to him, has two masters: custom or culture, on the one hand, and critical intelligence on the other hand. On the one hand, he says, "The purpose of all teaching is to express the cultural authority of the group by which the teaching is given" (12: 91). "In a word, to study education is to study the society which gives education. To understand a society is to know what and why it teaches" (12: x).

But, while education is always the expression of the will of some society, Meiklejohn argues that the best education is one that attempts to make all people members of one world society. The society has ideals which it does not attain but in favor of which it teaches. One such ideal is that of a world society. He looks ahead to the time when "all women and children and men may become intelligent, loyal members of a single social group, and it is for that group that teach-

ing should be done. . . . It follows from what has been said that all human beings should have the same essential education. This assertion does not deny that they should have different educations as well" (12: 282).

Here Meiklejohn is arguing for the study of the ideal form of world government, which would be the same everywhere, and also for the instrumentalist approach of working as a student or teacher upon the present government, accepting many of its shortcomings for the time being and trying to clear up the immediate difficulties.

The extent of divergence among the educators who have been quoted is best seen by studying the actual content and methods which they advocate for general education. In general, the group who think of education as closely and reciprocally related to society favor a curriculum centered on the present society, its problems, achievements, values, and operations; while those who think of general education as ideally the same everywhere favor a curriculum centered on the past, its values, problems, achievements, and operations. Yet all agree that a good general education should result in improvement of the present society.

THE COLLEGE AND SOCIETY

To proceed further with an inquiry into the social foundations of general education, it is necessary to answer some sociological questions about the relation of the college to the social structure.

General Education in Relation to Socioeconomic Status

In thinking about college in relation to socioeconomic status, it is useful to use a three-level scheme, the top level consisting of some 12 per cent of families (the upper and upper-middle classes of Warner's terminology [17: Ch. 2]), the next level consisting of 33 per cent of families (lower-middle class), and the lower level consisting of 55

TABLE 1
COLLEGE ATTENDANCE OF THE VARIOUS SOCIOECONOMIC GROUPS (1940)

Socioeconomic Groups	Percentage of Total College-Age Group	Percentage of Youth Entering College	Percentage Distribution of Entering College Students
Upper and upper-middle	8	80	40
Lower-middle	32	20	40
Lower	60	5	20

per cent of families (lower or working class). Table 1 shows college attendance according to these groupings, as of 1940. These estimates are derived from a number of studies of various kinds of communities and various kinds of colleges.

While no college publishes the socioeconomic distribution of its students in its catalogue, the general facts are well known. Yale, Princeton, Vassar, Wellesley, Bennington, Sarah Lawrence, DePauw, Carleton, Stephens, Mills, and Stanford draw students largely from the upper and upper-middle socioeconomic groups. The midwestern state universities correspond with the national averages of Table 1*. A particular midwestern church-related college in 1947 had a 23-51-26 pattern, at a time when 70 per cent of the men were getting assistance from the government through the GI Bill. The municipal colleges and junior colleges of large cities draw most heavily on the lower socioeconomic groups. A Chicago Junior College in 1946 had a 5-38-57 pattern.

As would be expected, many aspects of college life are influenced by these patterns of socioeconomic belonging. The vocational as against the cultural aspects of the curriculum, the drop-out rate of the college, the extra-curriculum activities, the political interests and activities of the students are all closely tied to the social structure of the society as it is mirrored with systematic distortion in one or another college.

Social Mobility and General Education

The facts about social structure in American society are partly at variance and partly in agreement with the American ideal of a classless society. While social classes do exist in America, as has been shown by Warner and others, they have also shown that these classes are highly fluid, with ill-defined boundaries and a great deal of movement of people across class lines. The writer has estimated conservatively that approximately 14 per cent of the population moves upward at least one class (on a social scale of five steps, or classes) during a life time (5: Table V).

If talent, or ability combined with personality, is responsible for most of the upward social mobility, then the American society may be

* Indiana University in 1946-47 had a status-pattern for male students of 28-45-27 (28 per cent for upper and upper-middle classes, etc.) when 80 per cent of the men were veterans and consequently were getting assistance from the government through the GI Bill of Rights, which increased the proportions of college attendance from the two lower groups (13).

said to be achieving reasonably well the democratic goal of equality of opportunity in a semifluid society. Education plays an all-important part in determining the extent to which talent and the ability-personality complex actually result in upward social mobility.

The questions may be asked — How and to what extent does general education in the colleges aid the ablest young people to rise in the social scale, and how and to what extent does general education at the college level make and keep the American society fluid?

The main avenue for social mobility in America lies through the high school and college. For the past three decades it has been generally assumed that a college education added to high-average or superior native ability would enable a working-class youth to enter a profession or move up to the managerial level in business and industry; that a high-school education is appropriate for the "lesser" white collar jobs, for skilled and semiskilled manual work, and for farm ownership; while less than high-school graduation is only suitable for unskilled and semiskilled work. It has been more the level of education reached than the content of the education which has determined the occupational level to which a youth aspires. A boy with an engineering degree is not thought to be better or worse prepared for a rise in the occupational hierarchy than a boy with a B.A. degree in history. Consequently, general education at the high-school and college levels has been a means of achieving social mobility.

It is not clear whether the occupational level to which a young person can expect to rise will continue to be so closely associated with the educational level he attains. There is now a strong push to raise the age limit for compulsory education to 16 in states now requiring education to fourteen, and to seventeen or eighteen in states with the age-limit now set at 16. There is also a drive to increase the number of youth who enter college and who graduate from college. If these drives succeed, they will force a re-evaluation of the relation of education to occupation. They will tend to divorce general education from occupational expectations and to create carpenters, farmers, and factory workers with a college-level general education. Thus, they may work to make and keep American society fluid by giving people of a variety of occupational levels the same kind and level of general education, which would tend to make it easier for them to meet together socially, to work together on civic problems, to share common values, and to encourage their children to intermarry. If general education at the college level spreads to a much greater number of youth, it will probably work toward fluidity in American society, but there is a basis for

doubt that general education will spread as far as its more enthusiastic proponents expect. These doubts will be explored later.

The leaders of all educational philosophies agree on the question of the desirability of extending general education at the college level to a large number and to a wider range of socioeconomic status. They favor it. The Harvard Committee aims to present "a view of students both united and divided; united, as heirs of a common past and agents in a joint future; divided, as varying in gifts, interests, and hopes" (3: 103). "The task of modern democracy is to preserve the ancient ideal of liberal education and to extend it as far as possible to all members of the community" (3: 53).

The President's Commission says, "We shall have to educate more of our people at each level of the educational program, and we shall have to devise patterns of education that will prepare them more effectively than in the past for responsible roles in modern society" (8: 23). "American colleges and universities must envision a much larger role for higher education in the national life. They can no longer consider themselves merely the instruments for providing an intellectual elite" (8: 101).

When an occasional critic of American education argues that only a few people are really worth the effort and expense of college education, even the advocates of the intellectualist conception of general education rise up against him. Van Doren, referring to one such criticism says, "The notion of Nock (Albert Jay Nock) is that only a few are educable, whereas the thesis of this book is that many are, and indeed all men" (16: 70).

The Practicability of Expanding General Education

The widespread faith of Americans in education has given general support to the expansion of secondary-school and college enrolments, such an expansion as has brought large numbers of young people of below-average intelligence and of lower socioeconomic status into the secondary school and promises now to reduce the economic barriers that have kept many young people out of college. With respect to socioeconomic status, it has been generally held that no one should be barred from college education because of economic disadvantage. With respect to intelligence or learning ability, there has been an evolution of opinion toward greater faith in the learning ability of the average person. Ten years ago it was generally considered that an intelligence quotient of 110 or higher (which was possessed by about one-fourth of the population) was necessary for success in college

work. But the President's Advisory Commission, basing its conclusions on results of intelligence testing and training experience in World War II, claims that half of the population can do satisfactory work in a general-education program at the college level. Most Americans are predisposed to accept this optimistic proposition, while most Europeans would disagree with it. The Harvard Committee says, "What passes for intelligence is certainly in part the same thing as opportunity, by which is meant the whole complex of surroundings which help to shape a child's view of the world and of his place in it" (3:6).

In fact, the American faith in the possibilities of the average person is so great that doubters feel hesitant about expressing their doubts. There probably are many, especially among the rationalists, who would like to see education at the college level more restricted than it is today, though they would not confess this desire.

Those who do wish to see general education made available to more young people call for methods including motion pictures and field trips to supplement reading. Hutchins proposes that we find less bookish methods for general education of the less verbal students. "I hope of course, that the methods of the schools may improve and that they will discover how to communicate an education to those who cannot read" (10:15). "Probably one-third of them [youth, up to the twentieth year] cannot learn from books. . . . At the same time we should continue our efforts and experiments to find out how to give general education to the hand-minded and functionally illiterate" (10:61).

While there is a general agreement on the desirability of extending general education to all youth who can profit from it, regardless of their economic circumstances, there is less agreement on the possibility of making general education at the college level meaningful to youth of average or below-average intelligence. A basis for this uncertainty is seen in the experience of the General College of the University of Minnesota. This College was set up to discover ways of giving a general education to students whose scholastic aptitudes and high-school records were below average for entering college Freshmen, or who did not have vocational goals which demanded a four-year college course. One statement of the aims of the College was: "We seek the only true democracy that should prevail in education, and that is the fullest and richest opportunity for every student to obtain the training to which he is entitled after a full consideration of his needs and abilities" (15:21). It was desired by President Coffman of the University of Minnesota and his associates that the General College

should experiment with general education for students with a wide range of abilities.

It turned out that the General College got students who had an average intelligence quotient of about 107, substantially below that of the remainder of the University. Still, these students had a wide range of abilities, and some of them had relatively high artistic or mechanical abilities combined with average or low intellectual abilities. In spite of the devotion and ingenuity of an extraordinarily able faculty, the proportion of students who remained in college for at least two years and carried a program to satisfactory completion was low enough to be a cause of concern to the faculty. After 1940 they added a number of vocational courses to the program, though students were still required to take at least two-thirds of their work in general education courses. In 1950, some 40 per cent of students were completing at least two years of college work satisfactorily.

This is evidence that more than half of the students between 100 and 110 in intelligence quotient will not complete a two-year program of general education. Hence, there is some reason to question the conclusion of the President's Commission on Higher Education that one-half of the youth of the country may be expected to pursue with profit at least two years of general education at the college level. It should be noted, however, that completing a two-year program of general education is not necessarily the equivalent of "profiting" from general education. No doubt some young people who stayed in college only one semester did profit from the education they received there. Still, the evidence is clear (from the Minnesota experience and from the experience of several municipal junior colleges) that less than half of the youth in the intelligence-quotient range 100-110 will complete the kind of a two-year college course which is now being given in general education.



Social Implications of Expanding General Education

Although there are limits on the extent to which general education at the college level can expand to include youth of lower socioeconomic status and youth of average or lower intellectual ability, a considerable expansion is certainly under way. This expansion may possibly double the proportion of youth in college, as compared with 1940, bringing approximately 30 per cent of American boys and girls to college at about the age of eighteen for a stay of one or two years.

Such a possible expansion has been viewed with alarm by some people who feel that it may create a "white collar proletariat" of col-

lege-educated people for whom there are not enough jobs that are thought to require a college education. At present there is no disparity between the number of college graduates — approximately 8 per cent of the youth population — and the number of professional and managerial positions in the labor force that are generally thought to require college training. But if two or three times as many youth enter college and two or three times as many graduate from college, it is obvious that many of them will fail to find the kinds of jobs to which college graduates in the past have aspired. Those who are frustrated in their need for what they consider a "suitable job" may become a discontented and socially unhealthy group of people, such as the university-trained people who could not get the kind of jobs they wanted in Germany during the 1920's and became a source of power for the Nazi fascist movement.

The President's Commission on Higher Education proposes to meet this problem in two ways. First, by anticipating a modest expansion of positions which require college training (examples given are a need for more pharmacists, more physicians, and more teachers). Second, by a change in the spirit and content of general education at the college level which directs this program at the problems of the citizen, the parent, and the person and plays down the vocational significance of college general education. The Commission recommends the development of more "community colleges," which will give a two-year terminal program including general education, aimed at improving the educational and cultural levels of the lower and lower-middle classes, without doing much to promote social mobility for individuals.

Practically all enthusiasts for expanding general education, whatever their philosophical position, argue that general education should be good for all kinds of youth at the college level, regardless of their vocational goals. They profess to see no insuperable difficulty in the fact that American college students are generally vocation-minded and regard college training, including general education, as a means to a vocation of middle-class or upper-class level.

Still, there is a problem here, evidence of which is the fact that no institution has yet succeeded in taking any substantial number of male college students, holding them for as much as two years with a program of pure general education, and then sending them into working-class vocations. American college students of lower and lower-middle socioeconomic status practically all regard general education as a means of personal social mobility, which will help them to rise in the occupational hierarchy. Against this motivation of the students is

sometimes arrayed a college faculty with a theory that general education can make the society more fluid by educating youth who will become factory workers, farmers, and carpenters.

Bearing on the issue of general education as a means for individual social mobility as contrasted with general education as a means for making better people and better citizens are the following questions which might be asked of one or another program of general education: Are any special means used to recruit youth of lower socioeconomic status for college attendance? What are the purposes for college-going of the youth in this program at the various socioeconomic levels? What does this program teach about the social structure of America? Does it emphasize upward mobility and the value of college education in achieving upward mobility? Or does it encourage students to accept their present socioeconomic status and to live a more satisfactory life within its boundaries?

The answers to these questions are not always clear in the catalogues of colleges or in the writings of educators. But, in general, it can be said that liberal-arts colleges tend to emphasize upward mobility, through their emphasis on the vocational values of a college education. Junior colleges, on the other hand, are divided in their emphasis on mobility — those which are essentially university-preparatory do emphasize social mobility, while those with emphasis on the terminal type of program which leads to semiprofessional jobs tend to encourage students to remain at their present socioeconomic level or to go no higher than lower-middle class while striving to improve their standard of living at their present socioeconomic position.

Somewhat related to questions about the general-educational program in its bearing on socioeconomic status of students are questions about the effects of the program on the caste-like status of Negroes and other dark-skinned people and on the ethnic status of foreign-born people. What encouragement or discouragement is given to students from these minority groups? Does the program encourage members of caste-like groups to remain within these groups or to mix with youth of other social groups? Does the program facilitate the merging of ethnic groups into the "old American" culture, or does it encourage them to retain their ethnic cultures? What does the general-education program teach in the way of facts and attitudes about caste-like groups and ethnic groups in America?

Barriers to Expanding General Education

Assuming that it is socially desirable to expand general education

at the college level to include about half of American youth, instead of one-seventh, as at present, the question arises about the barriers to expansion of general education. What are they and how can they be overcome?

The President's Advisory Commission on Higher Education indicates that the principal barrier is an economic one, but the writer has come to the conclusion that the principal barrier is not economic but motivational. Out of three young people with high average or superior ability who do not go to college, the writer estimates that one fails to go on because of lack of money while the other two decline to go on because they lack the motivation (6). They simply do not want to go to college.

It should not be surprising to find that many able boys and girls do not wish higher education. Their parents, in most cases, did not go to college. Most of their friends will not go to college. The jobs they aspire to do not require college training. They want the money and the independence that comes with a full-time job. Many of them, especially the girls, want to get married.²

Consequently the degree of expansion of general education in the college which can take place with young people as they are at present motivated is decidedly limited. A great expansion could come about only through a far-reaching change of attitudes toward higher education by children of working-class families, combined with a postponement of marriage by girls or a general approval of college students getting married while in their Freshman or Sophomore year.

The development of a liberal financial-aid program to help boys and girls of above-average scholastic ability to go to college would result in raising the proportion of youth who continue their education beyond high school from the present 15 per cent to about 30 per cent. That appears to be the limit with the present motivations for education of our youth.

²Thirty-five per cent of girls are married by the time they are twenty years old, and these are not the stupid ones. The writer recently studied the records of all the girls born in 1932 and living in a midwestern county seat. There were nineteen girls with an intelligence quotient over 115. In 1951 there were eight of these girls in college or some other post-high school training, four were married, and the remaining seven were working in offices and stores in their home town. The girl who was the most creative, popular, and generally well regarded in the class was uncertain about going to college, finally registered for a two-year course, and then decided to stay home when a certain young man came back to town, after having been away working during the preceding year. By April of the year after she graduated from high school she was married to this boy.

This does not mean that general education beyond high school must be limited to those who go to college. A very strong argument has been made for developing the concept of general education as a part of adult education and carrying it on for people throughout their lives. This conception can be accepted by people of all philosophical viewpoints.

What Group in Society Determines or Directs General Education?

In looking at the social foundations of general education it is appropriate to ask who the people are that control general education and direct it. There are two main groups. The persons who are trustees or regents of private or public colleges are one group, but they yield much of their power of educational policy-making to the other group — the teachers. They do this because they believe in academic freedom — they believe that teachers are, in the long run, the best judge of what to teach and how to teach it.

Among college trustees there are two principal groups. One group consists of upper-middle-class businessmen, who constitute the boards of trustees or regents of most independent colleges and state universities. The other group consists of religious leaders who determine the policies of the church-supported colleges. Some church-supported colleges in recent decades have changed the composition of their ruling bodies to include a majority of business and professional people. A few "experimental" and "progressive" colleges seek their trustees from among adventurous thinkers who are mavericks in the professions and business world.

The ordinary college or university trustee has a weakness for bigness and for new and better physical equipment. He likes new student unions and dormitories. He wants to see enrolment increase. He can be counted on to devote himself to the material aggrandizement of the college. At the same time he has a sincere belief in the value of impartial research and independent thinking and, consequently, he inclines toward giving the faculty its head except on certain controversial social or religious issues. This sincere belief in academic freedom, combined with the belief that young people in college should "see visions," endows the college with the best of American middle-class ideals but at the same time leaves it so ethnocentric that it is a curious kind of a place to a person from another culture — be he a foreigner, a class-conscious working man, or a working-class Negro.

The fact that the trustees are the people they are also makes it easy and almost inevitable that general education should be an eclectic

or neo-humanist affair in most colleges. To adopt either a rationalist or an instrumentalist curriculum requires the taking of a determined and well-thought-out stand by a considerable group either of trustees or faculty. Very few trustees are interested in or equipped to study through the problem involved, though something of this sort seems to have been done by the trustees of Sarah Lawrence College. As for college or university faculties, most of them are so heterogeneous in philosophical and educational preferences that they must create an eclectic curriculum unless (a) they have a strong leader or leadership corps who retain power long enough to select and recruit a complete faculty, or (b) a small segment of like-minded faculty members is set off with power to create its own program within the larger and heterogeneous whole.

The differences between the general-education programs of the several kinds of institutions are reduced somewhat by the fact that college teachers in America think of themselves as all belonging to one profession, transfer in considerable numbers from one type of institution to another, and belong to professional organizations which aim to improve general education. Thus, there is much cross-fertilization among colleges and a general body of theory and practice which is thought to apply to general education everywhere.

Related to the question of who controls the college is the question: What "ideal social type" does the program tend to produce? What are the characteristics of the ideal product of the program? — the gentile football player; the civic-minded club woman; the liberal citizen; the intellectual critic of present-day society; the conservative church-supporting layman; the upper-middle-class businessman; the labor leader; the intelligent lower-middle-class citizen and family head; the social and moral iconoclast. To illustrate the fact that there are different types of educational product from different kinds of general education, one has only to compare one's pictures of the typical graduate from Wellesley, Sarah Lawrence, and Stephens College; or Harvard, Dartmouth, Minnesota General College, and St. John's (Annapolis).

GENERAL EDUCATION AND THE STATE

The single most important fact about general education in recent centuries is that the state has taken it over from the church and the family. Thus the state, at least for Protestants, has taken over increasingly the task of shaping the minds and character of youth. This process has taken place because of the widespread need for literacy in modern times and as a by-product of the development of the national

state. Yet it was not thought of as a means to the aggrandizement of the national state. In fact, one of the arguments for universal education was the claim that it would keep down the power of the state.

John Stuart Mill advanced this argument when he urged that the state should *require* education for all, but not *provide* it. He thought that individual liberty could be protected from encroachment by the state if men were well educated, and therefore he argued that the *good state* would curb its own tendency toward domination by requiring all men to get the best possible education. But he thought that the state could not be trusted to provide good education — that should be done by private agencies.

This argument of Mill's is close to that of many liberal and individualistic people today. They grant that the state should *support* education for the children of all the people, but they do not trust the state to *direct* this education. State control of education is also opposed by certain churches who have their own schools and colleges and wish to retain control of them.

Although the modern state tends to dominate education, its use of education varies from state to state according to the reigning theory of the relation of the individual to the state. In the fascist state, education is used to train the individual to participate fully and productively in the society of those who, by race or some other characteristic, are "destined" to rule the world. Thus, it is argued, the individual achieves the highest goal of life. In the communist state, education is to train the individual for service to society, which in turn is expected to serve the individual.

In the capitalistic-democratic state, education is to train the individual for a combination of freedom and of service to society. This idea is sometimes phrased in the expression, "to train the man and the citizen."

At this point it is well to make a distinction between the *state* and the *government*. The state is the political and cultural community. It possesses a pattern of culture, which is a social consensus of approvals and disapprovals of human behavior. It possesses a number of institutions among which is the government. The government is an agency of the state — a group of officials whose duty is to interpret and execute the will of the state. The government may make mistakes in its task of interpreting and executing the will of the state, in which case the government (of a democracy) will be changed.

Hence, the question of relation of general education to the state is different from the question of relation of general education to the gov-

ernment. One problem of general education is to remain independent of the government and at the same time to serve and improve the state. Education must look to the government for financial support and yet be critical of the government.

The government at any given time has certain immediate policies which are aimed at serving the state but which may be in error. Policies which might be regarded as examples of this sort in the year 1952 are the "cold war" with Russia, fiscal policies which have an inflationary effect, and price control. Nearly everyone would agree that general education should be conducted so as to make students intelligently critical of these government policies, rather than supinely acceptant of them.

On the other hand, the state has certain broad purposes and values, such as the brotherhood of man, the freedom and integrity of the individual, the material prosperity of the greatest possible number of people. These purposes and values should be taught and promoted in general education, as a means of serving and improving the state.

At the present time there are a number of government projects which directly affect general education at the college level. Universal military training, as recommended by the Truman administration, would affect the numbers of youth going to college and would in itself become a means of general education. A federally-supported scholarship program, as recommended by the Truman administration, would affect college enrolments. Government programs for recruitment of students for the vocations of physical science, nursing, psychiatry, and clinical psychology, which have been instituted or proposed in recent years, have affected or would affect the numbers of students in college and the content of college programs.

It is useful to know, in the case of a given program of general education, how it is related to these government interests and activities of an educational nature and whether it results in students' viewing the policies of government more critically and more intelligently.

Of greater importance is the question of the relation of general education to the state, as the political and cultural community. Alexander Meiklejohn has written an arresting book on this problem. In his *Education between Two Worlds*, he develops the thesis that education is properly an expression of the authority of some social group and, in modern western civilization, of the state. He says, "Learning is not merely the acquiring of mastery over intellectual subject matter. It is, first of all, initiation into many social groups, and ultimately, into one social group" (12: 277). "The fundamental question with regard

to any system of education is 'By what social group is it given; what are the purposes of that group; why does it will that its members be educated?' " (12: 279).

General education expresses the will and wisdom of the community. "The authority underlying any scheme of education expresses the pattern of culture of some social group. . . . Wherever, in human experience, we find a group of people who are linked together by a common custom of approvals and disapprovals, there we have the materials out of which a distinct scheme of education may be made" (12: 96).

Meiklejohn recognizes that many readers will misinterpret his thesis as fascistic and takes time to deal with the problem of individual freedom in the face of community or state authority. He quotes with approval a statement of Rousseau in *The Social Contract*, "The problem is to find a form of association which will defend and protect with the whole common force the person and goods of each associate and in which each, while uniting himself with all, may still obey himself alone, and remain as free as before" (12: 215). Meiklejohn says, "Human freedom is not freedom from the state. It is freedom in and by the state" (12: 94). We must teach a young person "to be himself in an organized society." He goes on to say, "To comprehend the mingling of individual freedom and social authority which that statement intends is the intellectual task of modern education" (12: 95).

Meiklejohn points out that the state has ideals and goals which it does not reach in practice, but which it strives to reach through education. Thus the education is expected to be more advanced in its teaching than the society in its practice. "The society for which we teach, in some sense, approves actions which it does not fully practice" (12: 209).

The state, for Meiklejohn, is a group of people trying to work out the principles of human brotherhood. This is the ideal which the state seeks but has not yet attained. It is the ideal for which the state will permit and encourage education to work. "It is that notion [human brotherhood] which ultimately tells us both what and how to teach" (12: 209).

Brotherhood is achieved by living and working and thinking together. "When we say that men are brothers, we are saying that, both morally and intellectually, they are engaged in a common enterprise" (12: 204). "Men are brothers only as they become so by their own moral and intellectual achievements" (12: 206).

Thus a goal of general education is the creation of intellectual and moral unity in the life of a society — a human brotherhood of the

mind. In diverse America, with its socioeconomic, ethnic, and caste-like cultural differences, this is a difficult goal to attain. But every program of general education should seek to attain it. It is a fair question to ask of any given program: What is being done to create unity in our society?

If we turn to a range of typical colleges and ask this question, we see what general education is up against. Suppose we ask the following colleges how their program of general education contributes to brotherhood—to intellectual and moral unity in the U.S.A.—a southern white college, a southern Negro college, a Catholic college, a Lutheran college, an eastern municipal college, a Pacific Coast Junior College, a mid-western state teachers' college, an eastern ivy-league college. Probably none of these institutions has formulated for itself a statement of objectives which includes specific reference to human brotherhood. Yet all of them undoubtedly are seeking, more or less vaguely, to make their students better moral and intellectual brothers. Such difficulties as the colleges would have, were they to approach more directly the goal of teaching for brotherhood, all stem from the actual lack of it in American society. With misunderstanding, discrimination, diversity of religious and cultural heritage, all actually existent in the society, education must work slowly in the direction of greater brotherhood, even though movement in this direction is recognized by the state as in accord with its ideal.

General Education and World Order

What has been said about general education and intellectual unity in the state leads directly to the question of the relation of general education to unity on a world scale. In the attempt to promote human brotherhood and a community of mind among men, does the program stop at national boundaries, or does it seek to broaden the base of intellectual unity and the communion of minds throughout larger portions of the world?

Meiklejohn argues boldly for education for world brotherhood and world citizenship. "Education is the fitting of people, young and old, for the responsibilities and opportunities of that [world] citizenship" (12: 293). "Fundamentally education belongs to the world state. . . . Every human being, young or old, should be taught, first of all, to be a citizen of the world, a member of the human fellowship" (12: 286).

It is a fitting question with which to close a chapter on social foundations of general education. How does a given program of general education contribute to the moral and intellectual brotherhood of man

on a world scale? For instance, does the program present sympathetically the several great religions of the world, helping the student to discover their essential similarities? What does it teach about economic interdependence and the means of economic co-operation throughout the world? What does it teach about world government? How does it deal with the problem of war and peace?

Despite real advances made in many colleges in the past two or three decades, the answers to these questions can seldom be positive. Most colleges teach a nationalistic version of history. Many colleges maintain military-training units on the campus which speak more eloquently than lectures of the distance we have to go to attain world brotherhood.

Indeed, how many colleges could expect the consent of both the faculty and the trustees to the simple statement: "We teach for world brotherhood, world government, and world citizenship."

SUMMARY

The general agreement among college educators that general education should aim to produce better men for better times is very quickly lost in the different opinions as to the means to be used for working toward this end. The rationalists would have general education train the mind for wise and good action by practice on problems and solutions of the past and by rigorous intellectual habits. The instrumentalist would have students participate in the social and political action of here and now, with assistance from the faculty in critical analysis.

General education at the college level is seen as characteristic of the upper and upper-middle socioeconomic groups but relatively rare for children of families lower in the social scale. Yet, general education as a part of college education plays a large role in the individual upward mobility of a significant but small fraction of lower-status youth. Thus, general education helps to keep the American social structure fluid. Furthermore, by extension of general education at the college level to as many as half of American youth, the proponents of such expansion hope to keep the society fluid by increasing the amount of common intellectual and social experience of people from diverse cultural backgrounds. There are, however, limitations on the expansion of general education due to economic and motivational barriers which keep youth of lower and lower-middle socioeconomic status out of college. The motivational barriers appear to be more effective than the economic ones.

The colleges are controlled nominally by boards of trustees which, with relatively few exceptions, represent the upper-middle class of American society. These trustees allow wide latitude to the faculties for the content and form of general education, but the system operates within boundaries set by the fact that faculty and trustees possess much the same cultural ideals as well as that the trustees of most colleges will not permit open-minded study of certain controversial social and religious subjects.

With respect to the government, general education is quite independent of specific government control, although government influence on the program is possible through the presence of military-training units on the campus and through government programs of financial assistance to selected groups of students.

The relation of general education to the cultural community — the state — is tacit rather than explicit in most colleges. All education is an expression of the will of the state and, in a democratic society, is arrived at by inculcating a mixture of individual freedom and social authority. The state has ideals and goals which it does not reach in practice but strives to reach through education. One such ideal is that of human brotherhood. The goal of intellectual and moral brotherhood is one which general education should seek, although in practice it finds many barriers to brotherhood in the present society.

General education is just beginning to sense a mission of educating youth for world brotherhood and world citizenship. Though education is tied to national interests in many ways, still the ideal of world brotherhood and world government is in the society, and general education makes cautious progress in that direction.

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CHAPTER V

THE HUMANITIES IN GENERAL EDUCATION

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INTRODUCTION

There seems to be general agreement in the numerous writings on the subject of general education during the past two decades that the humanities constitute an important part of general or liberal education. It is, indeed, not infrequently argued that greater attention to the humanities, especially in comparison to the natural sciences, is a primary need of undergraduate education. Yet there is no clear consensus concerning the nature of the humanities, or the most effective methods of education in them, or even the purposes which the study of the humanities should serve.

The closest approach to agreement seems to be the idea, for the most part rather vaguely formulated, that the humanities are needed in liberal education as a balance, or even antidote, to the natural and social sciences. Knowledge and appreciation of the material products of our scientific culture need to be balanced, it is said, by knowledge and appreciation of man's nonmaterialistic achievements. The descriptive and statistical methods of the natural and social sciences need to be supplemented, it is argued, by the normative and philosophical approach of the humanities. And above all, the concern of the sciences with instruments and means needs to be accompanied by, and guided by, the humanistic formulation and determination of values and ends.

There is, undoubtedly, some point in each of these pleas for the humanities, but the definition of the subject matter of the humanities as nonmaterialistic, the conception of the methods of the humanities as nondescriptive and nonstatistical, and the conception of the end of the humanities as the determination or inculcation of values rather

than the discovery of means of power are insufficient to determine with any practical precision how an undergraduate course in the humanities ought to be constructed.

These statements of the need for the humanities are either too negative or too vague to provide adequate guidance in determining what the subject matter of undergraduate instruction in the humanities ought to be, what methods of instruction in them are appropriate and effective, and precisely what values are to be sought. At each of these points, consequently, it is possible to find diametrically opposed practices and theories. Since, for example, the subject matter of the humanities includes, by general consent, objects created by man's art, it is insisted that the beauty of automobiles and bridges, to take instances only from the first two letters of the alphabet, is a proper subject for humanistic study, and it is urged that the study of these has greater reality than the study of purely aesthetic products of artists. Since, moreover, the products of man's creative activities in art and literature may be analyzed and described, systematically enumerated in statistical statements, or arranged in sequence as historical events, it has been contended that study of the humanities may be made in these senses scientific and that approaches to the humanities other than the descriptive, statistical, and historical are inevitably impressionistic, loose, and at best pleasantly unrewarding. Even with respect to the formulation or inculcation of values through the humanities there is sharp divergence. It is sometimes insisted that attempts to achieve this purpose must involve indoctrination or propaganda and thus violate the spirit of the humanities, which should permit and encourage the widest possible individual differences of likes and dislikes and of opinions and judgments.

Courses in the humanities, consequently, vary widely and significantly in content, in method, and in aim. The subject matter may be anything from automobiles and interior decoration to Michelangelo and Picasso, or from current movies to Chaucer. The method may range from the historical and descriptive to the purely impressionistic. The goal may be the inculcation of a particular philosophy of life; or it may be the uprooting of fixed beliefs and attitudes.

THE ROLE OF THE HUMANITIES IN EDUCATION

Some progress might be made in resolving these oppositions and confusions by analyzing the needs the humanities are thought of as meeting in education, the conceptions of the subject matter of the humanities, and the range of methods being used in the study of them.

The need for the humanities in determining and establishing the values of our culture or civilization is often much too broadly formulated. The natural sciences and the social sciences have, or should have, their own concern for ends and values. The study of physics, whether by the research physicist or a class of Freshmen, proceeds on the assumption that knowledge is better than ignorance. The assumption is by no means self-evident. The case has often been made in one context or another that "ignorance is bliss." The pursuit of the biological or medical sciences assumes that life or health is better than death or disease. This is an assumption which every suicide challenges and on which the very common neglect of health or disregard of physical danger in the interests of pleasure or some higher objective casts doubt. It is difficult to justify the pursuit of the social sciences without regarding them as means for the improvement of political, economic, and social life, though it is sometimes hard to discover attention to ends or concern with distinguishing the good from the evil in the actual practices of social scientists. It would be disastrous for the natural and the social sciences if all assumptions concerning ends and values were to disappear from them, or if the practitioners of these sciences proceeded upon wholly unexamined assumptions concerning their values. The humanities are not, in short, the only repository of values. They have their own unique and highly important contribution to make to the establishment of values. It is their task to distinguish between the better and the worse in man's practice of the arts of language and thought and in the products of man's creative activity in literature and the arts. It is their function moreover, to make explicit and to analyze the ends and values assumed in the natural and the social sciences.

When teachers of the humanities undertake this task, they encounter in our day a serious difficulty. If a course in the humanities is announced to have as a major purpose the development in students of a philosophy of life, and especially if for this purpose the course deals with the writings of authors who have made important contributions to philosophical thought in the western tradition, it will be objected that students are being subjected to indoctrination. What right have instructors in the humanities, it will be asked, to assume that the truth about the nature of things, or about the nature of knowledge, or about the significance of man's career in the universe, has been discovered or that it can be formulated? Is not this the error of absolutism? Does it not tie the mind of the student to the past? Does it not render him incapable of meeting the new problems generated by the

new circumstances of our own day? Absolutism is, moreover, connected with totalitarianism. The philosophy of democracy must be pluralistic. What is needed is an attitude of democratic tolerance, not one of dogmatic certainty.

At this point teachers of the humanities who make the development of valid criteria of art, thought, and life major objectives of their teaching encounter a second objection. It is objected that the good life and good citizenship do not depend upon the possession of a set of ideas or philosophic principles but upon the possession of right attitudes, such as tolerance and good will. Men do not live, we are told, by ideas. The rationalistic approach to problems is sterile. Like the idea of absolutes, the methods of logic are naïve.

These twin objections to what is called absolutism and what is called rationalism seem to many decisive in opposition to courses in the humanities which undertake to develop a reasoned philosophy of values and ends. The humanities thus seem to be offered a desperate choice in modern education. If they undertake to relieve the doubts and confusions of our time about the ends and values of life, they must fall into absolutism and rationalism. If they accept the prevailing pluralism or relativism and anti-intellectualism of our time, they must accept their helplessness with respect to the needs of our culture for agreement concerning values and ends.

Fortunately, the dilemma appears in this simple and hopeless form only when each of the conflicting positions is stated by its opponent, or is stated in the most simple terms by its proponents. The denial of absolutes in which one school takes pride is found upon examination to be not nearly as thoroughgoing as might be supposed. As Taylor's discussion of this position in chapter ii of the yearbook makes clear, the "instrumentalist philosophy," though insisting that "there are no absolute truths or values," judges the value of knowledge by reference to its usefulness in producing "more abundant personal life, and a stronger, freer social order." Though it may hold that "there are no rules for human conduct which can be laid down in advance, according to which all human beings should behave," it is concerned with the patterns of human behavior "which are more or less productive in terms of individual richness and social desirability." And its moral element is "the insistence upon the value of free, spontaneous growth." Even the philosophy of pluralism seems on examination to assume personal life — a stronger, freer social order and the growth in maturity of individuals are always good, as over against their opposites, the impoverishment of the individual, the weakening of society, the stunt-

ing of individual growth. If maturity and freedom are always to be desired, the objection to absolutes is not a repudiation of all ultimately valid criteria, but rather a means of attacking what are supposed to be invalid criteria of others. In short, if such key terms in the instrumentalist position as "richness," "freedom," and "maturity" or "growth" were to be sufficiently clarified, and the key terms of what is described as the absolutist position were precisely defined, the difference between the two positions would be resolved into a problem of the basic values to which the two schools of philosophy or education are committed. It might then become apparent that the "rules for human conduct," to which, in the mind of the instrumentalist, the absolutist is committed, are not minutiae of human behavior but general principles of individual freedom, growth, social coherence, and justice, having precisely the philosophical status of general principles in relation to concrete circumstances, which the instrumentalist assigns to such terms as "maturity."

At present it seems too often to be assumed that one school has no principles and the other only a long outmoded set of particular rules. The truth seems to be that instrumentalism does not make its principles explicit or subject them to critical scrutiny. It simply assumes that everyone knows what freedom or maturity is and escapes the problem of analyzing principles by denying that it has any. Moreover, the so-called absolutist is not concerned with the perpetuation of a series of particular historically accepted rules for conduct or thought. He assumes that things are eternally what they are by constitution and nature. The atom, for example, is as it is, regardless of what we or our culture suppose or wish it to be. Human nature is what it is, and its basic traits are sufficiently stable and recognizable for us to have no doubt that the ancient Romans or Persians and the members of existing primitive tribes of Australia or Africa may all appropriately be identified with contemporary Americans or Chinese as human beings. Whatever, then, constitutes the set of essential traits by means of which this likeness is sustained and may be recognized constitutes in all ages, societies, and circumstances both a ground of reference and the basis for general criteria concerning what is better and what is worse for the individual and society. The description of these traits and the formulation of the criteria which may be drawn from them are done with relative degrees of success by various thinkers and cultures. The truth on these matters has not been ultimately grasped or finally formulated. But though we see through a glass darkly, we may perceive what is in the nature of things true concerning man and so-

ciety with sufficient clarity to make valid judgments concerning art, thought, and life.

If individual growth, social coherence, and freedom are, as the instrumentalist seems to assume, immutably good, there should be no objection to a serious and thorough-going analysis of these values or to a critical attempt to relate them to the basic nature of men and society. The so-called rationalist, convinced that principles of right and wrong are inextricably related to the nature and constitution of things and derive their authority from this relation and not from the formulation of any particular thinker, or school of thinkers, or age, will see no objection to exploring the whole range of human thought about the basic problems of values and ends or to considering the problems of applying general or universal principles to particular cases in the light of the complex circumstances encountered in each one.

In practice, the two schools as now opposed to each other can easily run into danger. It is conceivable that the so-called rationalist of Taylor's analysis (see chap. ii) might naïvely mistake the particular formulation of one philosophy for the ultimate, complete, and unalterable truth about man and society. I cannot think of an example of this error, but I should suppose that, in any case, it would not be successfully met by declaring that there was no continuing truth about anything. It is possible, too, that Taylor's instrumentalist might make the avowal that there are no absolute truths or values with sufficient seriousness to maintain that nothing is ever in any sense better than anything else, freedom better than slavery, for example, or a strong, free society than a feeble society without freedom, except as immediate individual or social circumstances make it so, though I can think of no true instance of this. The real and practical danger lies in the way in which the philosophy of relativism, as applied to education, affects the construction of courses in the humanities by undermining confidence in any attempt to resolve judgments of value in art or life, or judgments of truth in philosophy and ethics.

The greatest single need of the humanities in our day and, indeed, of education as a whole is the need for a thorough-going analysis of our basic philosophic problems. Until we achieve in America a much greater clarity in philosophy than we have so far managed to achieve, and until we reach much greater clarity in the philosophy of education, we shall continue to be engaged at superficial levels of controversy concerning educational theory and be doomed to confusions in educational practice. Schools of educational theory, identifiable chiefly by catch words attached to them by their opponents, will defend them-

selves by setting up straw men to demolish with vast enjoyment and satisfaction, while their adherents on curriculum committees and in the classroom carry on "experiments" based on further simplifications of their theories. The process of philosophic clarification needed in order to avoid these difficulties and dangers must include the consideration of the problem of values and cannot escape the consideration of the problem of knowledge and its methods.

The clarification of the problem of values or ends must include the determination of the extent to which the development of the student's competence to deal with questions of value is a matter of intellectual or of emotional advance. The discovery (it would be more appropriate to say rediscovery) of the role of feeling in determining thought has forced an emphasis in education upon the development of correct attitudes at the expense of intellectual development. The discovery of the role of emotions and attitudes was itself made by intellectual means. Educational philosophers did not suddenly find themselves having strong feelings about the importance of feeling, or discover in themselves deep emotions about the significance of emotion, or develop an attitude about attitudes. They defend their position regarding the importance of emotions by reference to what they regard as relevant data and by the statement of what they believe to be valid inferences and conclusions from such data. The separation of intellect from feeling and from much of contemporary educational philosophy seems, moreover, to be a reappearance in much simplified form of the old faculty psychology. The separation is theoretically and practically disastrous. For one thing, feeling without rational control becomes mere sentimentality. Undoubtedly, many decisions and judgments of human beings are emotionally conditioned or even determined but, however small the area of intellectual freedom may be, it constitutes, as the foundation for the criticism and correction of emotions and attitudes, the hope of human progress. In literature, in art, and in philosophy, reason must play its role in directing or refining taste, molding critical judgment, and modifying emotional preferences.

In the absence of rational controls, feeling becomes its own justification, and the strength of a feeling its only criterion. It is, therefore, no educational service to a student to convince him that whatever state of feeling he finds on looking into himself must be taken as ultimate and that he must insist upon cherishing this feeling against rational objections which may be raised to it. The chief objective of courses in the humanities is the development of an intellectual appreciation of the products of man's creative capacities as expressed in

art, language, and philosophy. To have reality, that appreciation must become personal to the individual. Emotion must be integral parts of it. But these must not be its ultimate determinants. Disciplined thought has its part to play in making the feelings appropriate to the object and in refining the judgment to bring it into harmony with the nature of things.

VARIOUS CONCEPTIONS OF THE SUBJECT MATTER OF THE HUMANITIES

This is not to say that students should study only the reasoned theory about the humanities. Critical appreciation of the humanities can no more be induced by study of the theory of the arts and philosophy than the art of swimming can be learned from reading a handbook. Students need to be introduced to notable achievements in art, literature, and philosophy, not merely for the purpose of knowing the individual works they examine but to learn what to look for in humanistic works, how to analyze them, and how to make intelligent and sensitive judgments concerning them. These objectives will not be achieved by courses which survey the history of cultures or civilizations with a view to giving the student historical information about a succession of cultural periods.

The subject matter of the humanities, products of man's creative activities in art, literature, and philosophy, can be dealt with in three different ways. The variety of approaches exhibited in courses in literature may illustrate the point.

In one sense a literary work — a novel, a poem, or a play — is an event. It appears at a particular point in time and is produced by forces then operative. Its character is determined in large measure by the particular experience, training, or intentions of its author, by the tastes and desires of his time, by the state of language and literature in the period, by the conditions of publication or stage production of the day. The work has been or is accorded some kind of reception. It has been or is approved, disapproved, perhaps neglected. Particular responses it provokes may be explained by an examination of the opinions, beliefs, and prejudices of the day concerning literature or concerning other matters with which literature may be related. Much of literary scholarship and a good many courses in literature are evolved from this basic conception of the nature of a literary work. As an event, the literary work has antecedents and consequences. The examination of one or both of these or of some aspect of one or both of them has been the major problem of scholarship and has constituted

the major concern of most courses in literature and of some more general courses in the humanities.

But a literary work may be regarded, not as an event, but as a symbol. In this view of it, the important thing is not that books happen but that they are significant. They symbolize, or represent, or reflect, or imitate, or in some sense stand for something more real than themselves. The truth about things may be mirrored or recorded in them. Chaucer's pilgrims, as one critic puts it, represent our "common, unchanging humanity." Balzac's novels may reflect with profound insight the conditions of the class struggle of his time. Hamlet may be taken to represent a universal truth about the relation of thought to action in the human soul and to illustrate, as one critic put it, "that all the noblest gifts of person, temperament, and mind slip like sand through the grasp of an infirmed purpose." By comparison with the first method, which may be designated historical, this may be called a philosophic mode of literary study.

A third method of literary study rests upon the conception of literary works as artistic structures, as special and unique objects, products of man's imaginative and creative powers — the power to construct characters, actions, scenes which have no other existence in concrete reality. Such study may take the form of an examination of the organization of the parts of a work in a unified whole, or of the literary materials and technical devices employed by the author, or of the peculiar effects appropriate to literature.

The proponents and practitioners of each of these three modes of literary study will not only claim superiority for their particular procedures but will find the others deficient. In the eyes of the adherents of the first two methods, in which literature is viewed as event or a symbol, the practices of the third method involve dealing with literature in a vacuum by disregarding both its universal significance and those circumstances which certainly affected its production and reception. The adherents of these first two schools will not be impressed by the reply that the significant things about literature have to do with those characteristics and qualities which are peculiar to literature, those aspects of it which it possesses as a kind of thing different from natural objects or from other human contrivances. On the other hand, in the eyes of the adherents of the second method, the method of dealing with literary works of symbols, those who practice the first method must, in their preoccupation with particular historical circumstances, fail to see the universal significance of literature, discovering only the nonessential and succeeding only in pedantic-

ally removing literary study from life. This group will be unimpressed by the reply that the attempt to uncover the universal meaning of literary works is at best a pursuit for philosophers or social scientists and at worst the reduction of literary study to simple-minded generalization about mankind or the inventions of fantastic mythologies of cultural history or *geistergeschichte*. Finally, in the eyes of the third group, those concerned with literary works of objects different in kind from human activities and other human products and from natural things, the first two methods described must seem to disregard the unique qualities of literature. And they will not be impressed by the contention that only in dealing with literature in terms applicable also to other things can literature be related to life or be given real significance. They will insist that it should be related to life, not by identifying it with other aspects of life, but by discovering its own special values as a human product.

Each of these conceptions of the subject matter of the humanities would, if strictly adhered to, produce courses quite different from those based upon either of the other two. The conception of humanistic works as events should lead to historical courses in which attention is centered upon the causes and effects of particular works or the products of particular schools or periods. The effect of graduate study in the humanities on undergraduate courses in the subject has been in this direction, for research in connection with graduate study has by and large concentrated upon the historical rather than upon the philosophical or the critical. Work in the appreciation of literature, or in the examination of its philosophical aspect or implications, has been regarded as less respectable from the scholarly point of view than historical study. Courses in the humanities, which are directed toward the examination of ideas on the assumption that humanistic works reflect reality or provide guidance for understanding life and its problems, have tended to be constructed⁹ about some important conflict of ideas, around the conflict of freedom and authority, for example, or the conflict of faith and skepticism. As courses of the first type have tended to be academic in the bad sense of the word, so courses of the second type have tended to do less than justice to the literary, artistic, and philosophic achievements of the Western world. Texts for study have been selected not so much for their intrinsic merit as for their explicit concern with the problems which interest those who construct the course. The best way to escape this difficulty seems to be the presentation to students of a series of masterpieces in a chronological order without reference to any basic framework of

ideas, in the hope that the reading and study of these masterpieces will induce a wide range of profitable reflection on the major problems of man and his career in the universe while providing the basis for the development of sound appreciation and critical judgment. Courses in the humanities which have concerned themselves basically with the traits of artistic construction in works of art and literature have tended to fall into the consideration of literary kinds or types.

The evidences of the three concerns with the subject matter of the humanities which have been described may be found, therefore, in the structure of humanistic courses. Most of the earlier courses designed as parts of general or liberal education were constructed historically and were planned as the study of a succession of historical periods. The conviction that what was most important for students was not information about the traits of historical periods but understanding of the basic issues reflected in art and philosophy lies behind the courses which organize material around great problems. On the other hand, concern for inducing a richer appreciation of humanistic achievements, at a time when the motion picture, the radio, and the comic book threaten the corruption of the arts, lies behind the courses organized about types or kinds of artistic work.

There is, however, a very considerable confusion of these conceptions and, consequently, of the organization of humanities courses in general education. The historical method may be introduced and even given great prominence on the theory that it provides the means for understanding the conflict of ideas and ideologies or as the best method of appreciation of the arts and philosophy. Or the designers of a humanities course may read into the history of the humanities the particular problems or conflicts of ideas with which they are themselves preoccupied. Or the history of ideas may be taken as providing the basis for appreciation and criticism. McGrath's description of eighteen courses in the humanities in various colleges of the country¹ makes clear that almost every combination of these concepts is somewhere being tried out.

The problem raised by different conceptions of the nature of the humanities, which lies behind the differences between historical, philosophical, and critical courses in the humanities, is considerably less difficult than the question of the relation of the humanities to the determination and inculcation of judgments of value. The products of man's art which constitute the subject matter of the humanities are

¹ Earl J. McGrath, *The Humanities in General Education*. Dubuque, Iowa: W. C. Brown Co., 1949.

unquestionably historical events. They are also unquestionably in some sense reflections of or imitations of life or reality. They are undoubtedly constructions of creative thought and artistic ingenuity. The problem, therefore, of the nature of the humanities is not which one of these conceptions is exclusively right, but which one should be the central concern of courses in the humanities. A book or painting is undoubtedly a physical object which could be subjected to chemical analysis, but such analysis would seem to be less than relevant for humanistic study of it. Works of art are in some sense social products. An eighteenth-century philosopher, novelist, poet, or dramatist could not have written in the manner of the nineteenth century, nor can one in the twentieth century revert completely to the eighteenth. The question is whether the historical and social context of literature is the most important aspect for treatment in undergraduate courses in the humanities. There seems to be an increasing awareness that the major purpose of courses in the humanities is not the inculcation of historical information and that, consequently, the historical aspect of the humanities should be introduced only as it may be serviceable to other purposes. Historical knowledge in and for itself is a desirable thing but must take a place below other objectives in the study of the humanities.

The relation of philosophical to aesthetic study of the humanities is somewhat more complicated. The study of the artistry or of the artistic traits of a humanistic work is more important to a perception of its philosophic import than is historical study. The assumption, for example, that a character in a novel or play is speaking what the author regards to be the truth about man or society can only be resolved by an analysis of the role of the character in the plot of the work — that is to say, imaginative works cannot be read as philosophic treatises. But even beyond this important need for careful consideration of the construction of works of art, the study of these matters with a view to developing a critical appreciation of artistic achievement is important in and for itself. It is important if art in America is not to be reduced to the present level of the new audio-visual means of communication together with the pulp magazine and the comic book. It is to be hoped that courses in the humanities will increasingly subordinate the historical to philosophical and aesthetic purposes, and that the relationships of philosophic and aesthetic study of the humanities will be more clearly made out. The latter will require a careful examination of the importance of a concrete and particular presentation of ideas in imaginative works and of the appropriate methods

for drawing general principles from the particulars of narrative, dramatic, and lyric constructions. Unquestionably, the concrete vividness with which ideas are presented in such works by comparison with the abstractness of ethical, political, and philosophical treatises provides both advantages and dangers to humanistic studies.

MATERIALS AND METHODS OF INSTRUCTION

The methods of humanities courses are largely determined by two factors: first, by the conceptions of the ends or purposes of study of the humanities and conceptions of the nature of the humanities; and, second, by the circumstances of formal education in this country. Among the second set of factors are the present methods of training college teachers, the number of students with whom programs of general education have to deal, and the traditions of lectures, textbooks, and examinations which, though with decreasing force, affect the modes of undergraduate teaching. The tendency is unquestionably away from the method of the textbook and the lecture and in the direction of group discussion of particular humanistic works. But many "discussions" classes are thinly disguised or badly organized lectures, and too much of the study of particular humanistic works consists in the acquiring of historical information about them or the recording of the instructor's judgments concerning them. Improvement in methods of instruction must come, not by way of the invention of new devices, but rather by way of adjustment to clearly formulated ends and precisely formulated conceptions of the nature of the humanities.

The best progress in these directions is likely to be made when a staff of teachers drawn from various departments of humanistic study gives itself to careful planning of a co-operative course, faces the basic philosophical problems of humanistic study, clarifies its thinking about the nature of the humanities, and considers content and methods of the course in the light of conclusions on these subjects. All this is a long and difficult task, given the present departmentalized training of teachers in the humanities, the confusion and superficiality of educational philosophy in this country, and the stubbornness of institutional traditions. Its difficulty is perhaps only equaled by its importance.

The humanities must find some way of responding to the appeal made to them on all sides to face the problem of values and ends in our society. Those who make this response will not and should not be content with the reply that there are no fixed and determinable values. Nothing short of a full and precise philosophical basis of civilization

and culture is sufficient for the needs of our day or should content those who make the humanities a profession. On such a basis, it would be reasonable to expect the development of insights into the proper subject matter and methods of courses in the humanities, and from such insights effective practice might be expected to flow.

CHAPTER VI

SOCIAL SCIENCE IN GENERAL EDUCATION

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Nowhere in the field of general education are the problems that relate to the philosophical, psychological, and social foundations more omnipresent and more challenging than in the area of the social sciences. It is in this area that all the problems and pressures that give rise to the need for general education come to a focus, with the result that the teacher of social science in general education faces a bewildering assignment involving many dimensions. He is asked to impart to the student a sweep of knowledge and a habit of reflection that will equip one for dealing with the complexities of modern society. The assignment involves a consideration of the ethical norms that make up or ought to make up that society. It demands a decision as to what particular knowledge should be regarded as providing the base for the student's reflections. It is concerned with questions of how the student will best learn, retain, and apply this knowledge, and it is deeply entwined in all the concerns of what society is, its potentialities, its problems, and its demands upon and expectations from the educational system.

The dimensions of this assignment, as those who have attempted to develop general social-science courses will attest, are enormous in scope and necessarily carry the planners of such offerings into curriculum problems that criss cross the many dilemmas already posed in the earlier chapters of this volume. The social scientist, mindful of general education's objective of training the "whole" man, is not always certain as to the precise role that he and his course should play. The theories underlying general education assume the possibility and the desirability of a "complete" education in which the student's knowledge and experience are harmoniously blended to produce a form of

behavior that maximizes his intellectual and emotional life. As it concerns instruction in the social sciences, this "complete" education would prepare the student for a "personal and civic life . . . based on ethical principles consistent with democratic ideals"; for active participation as "an informed and responsible citizen in solving the social, economic, and political problems" of his community, state and nation; for recognizing "the interdependence of the different peoples of the world and one's personal responsibility for fostering international understanding and peace"; for applying "habits of scientific thought to both personal and civic problems"; and for acquiring and using "skills and habits involved in critical and constructive thinking."¹ For how much of this preparation shall the social scientist assume responsibility? In what manner can it be best accomplished and how shall such preparation be related to the instruction offered in other compartments of general education — the humanities, the natural sciences, communication, and the extracurriculum? What, in short, is the distinctive contribution that the social sciences ought to make to general education? What follows here is an effort to consider these questions in the context of the broader theoretical concerns expressed in the opening chapters.

SOCIAL SCIENCE AND THE THEORIES OF GENERAL EDUCATION Theory and Practice

The practicing social scientist frequently finds it difficult to relate, in any precise way, a particular educational theory to his work in the classroom. This difficulty arises perhaps from the nature of his assignment, because he is called upon to concern himself simultaneously with the data and methods of the social sciences, with the ethical and legislative problems that call for "solutions," with the value implications such deliberations invoke, and with the aspirations and interests of individual students. How is he to integrate the laws and principles which presumably have been validated by the findings of social science with the passions and preferences that give life and meaning to the value context in which the student must necessarily deal with them? Is his function one of maximizing the student's intellectual comprehension of the social realm, such as is implied by the rationalist position? Or should the communication of basic social values be given the main emphasis, accepting the neo-humanist position? Or are the behavioral

¹The objectives quoted are from the Report of the President's Commission on Higher Education, *Higher Education for American Democracy*, Vol. I, pp. 50-57.

outcomes that such instruction may produce to be given the major consideration, in the pattern of the instrumentalists?

To the practicing social scientist the philosophical battle among the diverse groups of theorists rages dimly in the background. Likely as not he has taken up his assignment without a conscious commitment to any particular philosophical theory, and, in this sense, is perhaps more frequently than not an eclectic neo-humanist. He greets his students in a variety of poses, now an instrumentalist, now a humanist, now a rationalist, depending on the point to be made or the idea to be explicated, and he sometimes harbors the suspicion that, even in those programs that are described as prototypes of the warring camps, the ideological convictions are by no means clear and consistent and that there is more than a little foraging in the camps of the opposition.²

To the social scientist, moreover, the conflicting tendencies in "rationalism" and "instrumentalism" are not necessarily irreconcilable. Taylor's formulation of the conflict seemingly stigmatizes rationalist inquiry as inevitably lost in an endless search for "absolute values which reflect factors inherent in the universe and inherent in the relation of man to nature."³ Social scientists generally will probably agree that rationalism, described in this absolutistic fashion, has no essential place in the social sciences, preferring rather to accept the instrumentalist emphasis on empiricism and the underlying assumption that "there are no absolute truths or values."⁴ However, many of them will insist upon a further detailing of the attack on rationalism before they are ready to join the fray. Rationalism may also mean "comprehending the world by means of the critical intellect, searching for causes, reasons, and motives," and it may be understood, too, "as the endeavor to represent a particular political measure as the only rational one and to call for it in the name of reason."⁵ Defined in these

²It would be impossible, for example, to classify the approach used in the basic Social Science course of the Department of General Studies at the University of Minnesota. The materials are historical, documentary, analytical, descriptive. Some are impressionistic and speculative, others are rigorously empirical. The spirit of inquiry is both rationalist (i.e., deductive) and instrumentalist (i.e., inductive). Topics are designed to touch as closely as possible the life experiences of the student and in this sense the course is instrumentalist, but man's concern with values and ideals and his search for a way of life are constantly kept before the student and in this sense it is humanistic and/or rationalistic.

³Harold Taylor, chap. ii, p. 27.

⁴*Ibid.*, p. 36.

⁵Quoted from Wilhelm Ropke, *The Social Crisis of Our Time*, p. 48. Chicago: University of Chicago Press, 1950.

latter ways, rationalism is an indispensable method of inquiry for the social sciences, particularly if we keep in mind the objectives toward which general education is presumably oriented — the preparation for life based on “ethical principles” and on “responsible” private and public codes of behavior. Such preparation, if it is to be at all meaningful, must necessarily come to grips — rationally and analytically — with the question of how “particular truths and particular values”⁶ are to be determined.

In this connection, it deserves special emphasis that instrumentalists, too, have a value system based upon rational principles of deduction. This system is reflected in numerous courses sponsored by admitted instrumentalists that deal with “solutions” of social problems, preparing for “effective” citizenship, or offering “designs” for democratic living. Underlying such curriculum offerings are explicit notions concerning which ethical standards ought to prevail in society. Such notions are necessarily deduced through rational and analytical processes and, because of their nature, cannot be induced from proved experience.

The polarization of rationalism and instrumentalism may serve to sharpen issues in dispute but it can also serve to obscure similarities and to impute differences that do not actually exist. At its present stage of development, and perhaps inevitably, social science in general education cannot fulfil its role if it is anything but eclectic in its philosophical orientation. This is not to gainsay the value of clarifying tendencies implicit in different theories, but it is to deny that any particular approach is the only meaningful or acceptable one for the further development of social science in general education.

The Social Context

The divergent philosophies of education begin to take on operational meaning for the social scientist when he assays his function in terms of the ultimate effect his instruction will have upon the social behavior of the student. Havighurst concludes that, whatever their differences in outlook and method, rationalists and instrumentalists are at least agreed “that a good general education should result in improvement of the present society.”⁷ But how can the social scientist most appropriately contribute to this objective? Is his proper function one of training the student’s intellectual powers, helping him to maxi-

⁶ Taylor, *op.cit.*, p. 36.

⁷ Robert J. Havighurst, chap. iv, p. 79.

mize his abilities to read, analyze, interpret, and reason, without necessarily assuming responsibility for the consequences such instruction may have upon the individual's behavior? Or should he seek to communicate to the student and internalize within him an understanding and acceptance of the values believed worth preserving in our cultural heritage? Or is his proper function a combination of these plus helping the student acquire those social attitudes, citizenship "skills," and emotional responses that presumably will prepare him for a rich personal and social life?

The last would seem to be the social scientist's function as implied in the instrumentalist position. This is obviously a demanding and ambitious assignment which requires an intensity of knowledge, a degree of instructional skill, and a certitude in conviction that many practicing social scientists regard as beyond their attainment. Yet, the social scientist cannot escape from the pressures of the social context. Whether he be rationalist, humanist, or instrumentalist, his subject matter is the social order and he deals continuously with the hopes, wants, ideals, needs, and failures of modern society. He inevitably deals with the here and now, which for him can be variously studied, by a rational search for tenable and abiding principles, arrived at both inductively and deductively, by the tracing of intellectual ideas and the historical unfolding of crucial events, and by an elucidation of the meaning of direct experience. Thus, whatever the main tendency of his particular approach, the social scientist remains a composite rationalist-humanist-instrumentalist.

The social foundations of general education have an unusual degree of immediacy to the social scientist because his subject matter is so closely related to the problems of the social order and because the acute social crisis of our time places him under pressure to produce "answers" to crucial dilemmas or at least to provide a rational framework within which they may be understood if not resolved. He inevitably must orient his work to three basic considerations: (a) the conditions of society and the etiology of its problems, (b) the alternative value systems that describe the range of human potentiality in dealing with social conditions and problems, and (c) the processes of learning whereby ideas of major social importance and habits of systematic reflection can best be acquired by the student. How the social scientist proceeds to deal with these matters will depend in part upon his particular philosophical orientation, but more largely upon the specific needs his instruction is presumed to serve in the light of the particular social context that surrounds the educational system.

A social condition of primary significance to the social scientist is the democratic assumption, underlying both education and the larger society, that man is competent to direct his own affairs and that there is no appeal for guidance beyond man's individual and collective intelligence. Accepting this democratic view, the social scientist regards his function as one of nourishing this competence by helping man to expand his knowledge concerning the nature of man, the nature of society, and the techniques with which the former can control the latter. He is, of course, painfully aware of the fact that there are wide areas of ignorance that impose severe limitations on how adequately this function can be performed, but he is compelled by the nature of his role to press ahead as best he can, communicating what is known and suggesting hypotheses concerning how we may come to know what is not known. His work, given the present state of social-science knowledge, will not be definitive; it will be suggestive and challenging, offering the student what insight it can concerning the basic relationships in society.

The Place of Social Science in General Education

Much of the developmental work in social science in general education involves efforts to integrate the specialized concepts of the separate disciplines in order to make available a more meaningful and useful "total setting" for the study of man's problems. Concern with integration and with the "total setting" is not, however, peculiar to the social sciences; it is, also, a central objective of each of the other compartments of general education. Thus, as each reaches out for a larger and more comprehensive total framework, the humanities, the natural sciences, communication, and the social sciences — and, for that matter, even the extracurriculum — come to deal more and more with the same subject matter, because it is, after all, the same "total setting" in which each is interested. Ultimately, despite the obvious differences in initial points of departure and basic subject matter, they arrive at the same destination — an integrated setting in which man is viewed as a social animal, living in and conditioned by a physical universe, unceasingly involved in interpersonal communication at many levels, and guided consciously or subconsciously by values, sentiments, ideals, and ambitions. Viewed in this manner, the present-day compartmentalization of general education is no less arbitrary than the much-decried division of the social sciences into economics, psychology, sociology, anthropology, political science, history, and geography.

Yet, for administrative and pedagogical reasons, some division of subject matter among the general studies is essential, although it could be argued that for general education to be truly *general* it must surmount the obstacles to total learning now interposed by the new compartmentalizations. In any case, accepting the adequacy of the present divisions in general education, we are still obliged to make clear the particular place that each area occupies in the total scheme, indicating how each may complement the others.

The particular place of social science in general education eludes precise definition because, as we have noted, it is one of many dimensions. Its subject matter ranges over all the concerns of the individual and of society, and, as a result, it invariably forms alliances with all areas of knowledge. With the humanities it shares a common interest in all aspects of man's relations with other men. "They have humanity in common," says Robert Redfield. "Humanity is the common subject matter of those who look at men as they are represented in books or in works of art, and of those who look at men as they appear in institutions and in directly visible action. . . . As physics is concerned with energy and matter, and biology with organisms and life processes, so social science is concerned with the way men and women feel and act and think. . . . What matters to us all, what we live for, is sympathy, understanding, imagination, reason, tradition, aspiration, and personal and human associations."⁸ The point of alliance of social science with the natural sciences is a common allegiance to the scientific method. While social science, for reasons frequently observed, does not have and perhaps never can have anything approaching the degree of precision of natural science, it nevertheless "strives for objectivity, system, and comprehensiveness. It uses precise methods where it can, and where it can it experiments, and where it can it measures."⁹ The link between social science and communication is, of course, apparent, and, where communication is viewed as a study of the processes and techniques of community-building, the identification between them is complete, with communication dealing primarily with the processes and techniques of interpersonal relations and social science with the more substantive implications of societal forces. Similarly, the extracurriculum, where it is organized systematically as an integral part of a general-education program, comes to concern itself with questions of individual and group behavior, which,

⁸ Robert Redfield, "Social Sciences among the Humanities," *Measure*, I (Winter, 1950), 63.

⁹ *Ibid.*, p. 69.

however diluted in content or remote from formal classwork, are essentially social science in character.

It may be said, then, that social science studies the social phenomena of the universe with the method of natural science; it seeks to objectify the sentiments, ideals, and values which — on the subjective side — are the subject matter of the humanities, and it strives to communicate an understanding of the interpersonal relations that constitute the foundations of any community. Because of its concern with the totality of human experience, it confronts the student with questions that are central to all aspects of his life and thus occupies a strategic place in the educational system. In this context, it should be noted that a major difficulty besets social science because, in its quest for definiteness and precision in the pattern of the natural sciences, it has frequently emphasized partial concerns and sometimes even the minutiae. While these are valuable in their own way, they have often diverted undergraduate instruction in social science from the "whole" problems where lie the questions which are more exciting and more stimulating but which, unfortunately, are not usually susceptible to rigorous scientific inquiry. The age-old problems of happiness and justice, of right and wrong, remain the central concerns of man in our time as in any other.

Science can teach us about the relativity in cultural standards; it can correct false notions concerning objective phenomena, and it can measure social situations. But science cannot mediate conflicts in values. This is a vital concern of the social studies, and, while they cannot presume to offer final and conclusive judgments concerning such mediation, they must persist in their efforts to study, observe, and classify those forms which, on pragmatic and empirical grounds, are found to have the greatest value for the democratic society.

General Education's Concern with Behavioral Outcomes as They Relate to Social Science

Underlying most current theories of general education is the notion that each person's behavior should be attuned to democratic values. The rationalists' objective is frequently framed in terms of achieving a community in which the processes of reason will be controlling, which is only another way to define democracy. Humanists, as their name suggests, place primary emphasis on learning the humane values as the basis for democratic citizenship. The instrumentalists bring a different kind of emphasis with their insistence upon democratic *behavior* as the goal of education. In their view, behavior stands op-

posed to verbalization which is devoid of emotional and motivational content. This emphasis raises many theoretical and practical questions for the social scientist. Can the student be conditioned by the educational process to behave in conformity with certain prescribed modes? How and by whom are the prescribed modes to be determined? How can the social scientist in his role as teacher guide the student beyond the learning stage into the acting stage? Is the social scientist to regard his function as reaching beyond the communication of an *understanding* of the forces that shape human personality and group life? If the answer is affirmative, he next needs to know what methods and techniques will achieve the conditioning of the proper nonintellectual habits.

To the social scientist the challenge to condition the student to prescribed behavioral patterns presents a double task, first, of defining the desired norms of conduct (which involves, of course, a series of basic ethical judgments), and, second, of developing and executing pedagogical techniques that will endow the student with intellectual habits, social manners, and emotional responses that bring him into accord with the desired norms.

One of the behavioral outcomes given much attention in relation to the social-science area is the development of what is now usually called *critical thinking*.¹⁰ The objective is often stated in such terms as developing skills and habits in critical and constructive thinking, or acquiring facility in the application of the scientific method. As Corey has indicated, the psychologist is likely to regard such objectives "with some skepticism" because they imply "that one can teach knowledge and understanding in isolation, skills and abilities in isolation, and attitudes and appreciations in isolation."¹¹ Whether a student acquires the ability to think critically will depend upon (a) his knowledge concerning the subject about which he is to think critically, (b) his familiarity with and ability to employ systematic processes of reflection, and (c) those personality factors, such as general intelligence, special aptitudes and emotional conflicts, that either facilitate or block his ability to conceptualize.¹² If the social-science teacher has skill

¹⁰ For example, the Co-operative Study of Evaluation in General Education of the American Council on Education assigned to the social-science subgroup the task of evaluating critical thinking in the social sciences.

¹¹ Stephen M. Corey, chap. iii, p. 58.

¹² Corey bases much of his discussion of learning on the premise that emotional factors are of primary importance and that intellectual development cannot be dealt with as an isolated aspect of education. See chap. iii, pp. 58-60.

and a strong grasp of his subject matter, he can communicate the data concerning the subject and he can assist in helping the student acquire systematic habits of reflection. But how is he to go beyond this, to reach emotionalized prejudice and psychological blocking? There is a point at which instruction becomes psychotherapy, because the ability to think critically is dependent only in part upon knowledge and intellectual skill, and the social scientist can hardly be expected to assume the responsibility for personality re-education that enables the individual student to acquire the emotional responses that are presumably requisite to "proper" behavior.

The social scientist is also concerned with the behavioral outcome of "responsible citizenship," which is another objective of general education that enjoys considerable popularity. How is the social scientist to characterize the "responsible" citizen? Is such a citizen informed concerning the affairs of his community? Is he also motivated to participate? And, more significantly, is he prepared to make "proper" choices in matters of policy conflict? An essential of social-science instruction is the preparation of the student for the formulation for himself of the implications, alternatives, and consequences in actual behavior of the fundamental ideas he may study in this area. But when the focus of instruction is shifted from the subject matter to the student, when the outcome of education is evaluated, not in terms of what the student learns about given situations but how he behaves with respect to them, the social scientist — as is true of any educator for that matter — assumes the responsibility for communicating attitudes and conditioning preferences, which, in the ultimate analysis, may not be related to intellectual development at all.

Concluding Statement

In their search, then, for a consistent and meaningful curriculum that expresses in practice the spirit and aim of general education, social scientists are confronted by the most serious philosophical, psychological, and social questions. Aware of the cultural crisis that faces mankind, they concede the urgency of realizing general education's objective of training men and women who can think critically and act democratically. But, viewing the many dimensions of their assignment and being constantly aware of the limitations inherent in their subject matter, they tend to make a modest assessment of their likely contribution to the training of the "whole" person.

THE PRESENT STATE OF SOCIAL SCIENCE IN GENERAL EDUCATION

Immense Diversity among Programs

The bewilderment that besets planners of general-education programs in social science is reflected in an immense diversity of courses described as "social science," "social studies," or "social problems." This diversity perhaps has to do more with the many dimensions involved in providing a general education than with the theoretical differences among rationalists, humanists, and instrumentalists. For example, some planners develop their courses around the notion of the preparation for citizenship in the specific sense of acquainting the student with the institutions and processes of government. Others seek to transmit an understanding of the cultural heritage through courses in contemporary civilization; still others offer a diagnosis of contemporary social, economic, and political problems, or they deal directly with the application of the scientific method to the problems of society, or they emphasize a study of the patterns of cultural organization.¹³ Some courses are "student-centered" in the instrumentalist sense, while others place primary, if not exclusive, emphasis upon "subject-matter" without paying any particular attention to how the course content will ultimately affect the behavior of the individual student. Teaching methods likewise reveal a wide range of techniques. Many courses still rely on an unmodified lecture system, while others combine lectures with discussion groups or classroom study with field experience.¹⁴ Thus, social science in general education has a variegated character that does not lend itself to analysis in terms of clear-cut categories.

The diversities result, in part at least, from the fact that course planners are themselves products of traditional specialized training, each having notions about approach and content that grow out of his particular background. Historians will tend to stress a genetic approach to social knowledge in a chronological context. Sociologists frequently utilize institutional analysis as a means of diagnosing contemporary social problems, while psychologists emphasize the study of the determinants and mechanisms of behavior. Economists tend to

¹³ Many basic social-science courses are described in Earl J. McGrath (Editor), *Social Science in General Education* (Dubuque, Iowa: William C. Brown Co., 1948), and Albert William Levi, *General Education in the Social Studies* (Washington: American Council on Education, 1947).

¹⁴ See Ernest Horn, *Methods of Instruction in the Social Studies*. New York: Charles Scribner's Sons, 1936.

think in terms of certain basic macroeconomic relationships, anthropologists in terms of cultural patterns. Political scientists usually organize their materials in the context of political institutions and the relationship of the citizen to his government, while geographers develop their work along the lines of regional analysis. Each approach, of course, has its special advantages and limitations, but each seeks the same objective of achieving a larger and more comprehensive setting for the study of phenomena. The widespread current interest in social-science integration leads some general educators to the hopeful view that eventually a body of general social knowledge will be available to serve as the basis for general education in the social sciences.¹⁵

The Movement toward Integration

Underlying the efforts to develop general, integrated courses in the social sciences is, as we have noted, the need to cross-relate and synthesize the central findings of the separate disciplines. Originally the effort at integration took the form of the "survey" which attempted a systematic abridgment of the data and principles of the separate disciplines. As this approach fell into disfavor, other efforts at integration emerged, among them the study of contemporary civilization in an historical context, the analysis of crucial social problems, the study of scientific methodology as applied to areas of social interaction, and the analysis of the patterns of cultural organization. In the present period, the theme of personality in culture as the integrative framework is enjoying a good deal of attention.¹⁶

The newer emphases recognize that man can be only partially studied in the segmental contexts of the separate disciplines, that social, economic, political, psychological, geographic, and ideational influences do not exist in isolation, and that what is needed is a unified science of behavior or at least a systematic interrelating of the verified hypotheses concerning human behavior. Unfortunately, social science in general education must proceed to its labor at a time when the development of such a unified science is still in the formative stage, although many significant suggestions have begun to emerge from the

¹⁵ See Mark A. May, "Education and a Science of Human Behavior," *Journal of General Education*, (January 1951), 137-48; also, Talcott Parsons, "Graduate Training in Social Relations at Harvard," *ibid.*, pp. 149-57.

¹⁶ See, e.g., David Riesman, "Some Problems of a Course in 'Culture and Personality,'" *ibid.*, pp. 122-36; also, Clay P. Malick and Morris Garnsey, "The Case for General Education in the Social Sciences," *American Economic Review*, XL, (Supplement, December, 1950), 214-21.

institutes of interdisciplinary research. The immediate problem is one of adapting such interdisciplinary materials for undergraduate instruction. This exposes us to the related problem of the lack of instructors who have interdisciplinary training. In this respect, it should be noted that a number of graduate schools are re-examining their training programs in the light of the need to prepare both researchers and teachers on an interdisciplinary basis.¹⁷

Beyond the problems of arriving at an operationally useful integration and of training persons competent to handle such work there exists the further need of relating the integrated work to the broader curriculum. The ultimate success of integration is perhaps dependent upon the recasting of the undergraduate social-science curriculum so as to take account of the complementary relationship between the general and the special offerings. By far the greater part of social-science instruction at the college level is still provided in the traditional specialized manner, even where the obvious purpose of the instruction is general and nonprofessional. Also, even when offered, general courses frequently enjoy only limited acceptance and are regarded as tolerable, but nonessential, additions to the curriculum. It is not uncommon, in fact, for traditional social scientists to condemn the general course as a hash, a *potpourri*, or even worse, an adventure in propaganda. On the other side, some general social scientists invite the hostility of the specialists by suggesting that the general work can or will supplant all that is now of value in the separate disciplines in so far as a general education is concerned. The attitudes on both sides are, of course, mutually destructive, because general and specialized offerings in the social sciences should be regarded as complementary, with each having much to gain from the other if intelligently related in the total curriculum. The general offering should be conceived as a suggestive summary view of the total social setting, as opening avenues of thought that may not conveniently be opened by the special disciplines, as stressing the interdependence of various factors and influences, thus guarding the student against likely oversimplifications, and as exciting and stimulating the student's curiosity concerning the major concerns of society. But this is only the beginning of a general education in the social sciences; beyond it there is need for the more systematic and more dis-

¹⁷ See, e.g., *The Preparation of College Teachers*, pp. 145-68. Report of a Conference Held at Chicago, Dec. 8-10, 1949. Edited by Theodore C. Blegen and Russell M. Cooper. American Council on Education Studies, Series I, Reports of Committees and Conferences, No. 42, Vol. XIV, July 1950. Washington: American Council on Education.

ciplined study of the methods and contents of the various specializations. The problem of integration will not be solved until this relationship between the general offerings and the total curriculum has been satisfactorily dealt with.

Social Science and Social Problems

To what extent can the scientific method be applied to social problems? This question, while not always stated in precisely this form, appears again and again in discussions concerning social science in general education. On the one side, there are those who believe that, by the systematic ordering and application of scientifically validated principles concerning social phenomena, we can achieve a better society and that the function of education is, therefore, the inculcation of the scientific spirit in all aspects of human relations. This view is stated in its most positive form by George A. Lundberg when he answers affirmatively the question, "Can Science Save Us?"¹⁸ On the other side, there are those who believe that social problems inevitably involve questions of morals and values that are not susceptible to scientific treatment and that education, therefore, must regard science as only one dimension in the study of social problems. In this view, the study of society is both scientific and humanistic and the indiscriminate use of the term "science" to cover what are essentially normative proposals for "solutions" of social problems is deplored. In his *Education in a Divided World*, James B. Conant supports this view when he writes, "I am one of those who look forward with confidence to the rapid progress in these [anthropology, sociology, and psychology] sciences. Even today too little of their point of view and their findings is presented as a part of general education. Nevertheless, I believe that no good educational purpose is served by spreading the ambiguous title 'social science' over all the academic activities concerned with a study of man. And positive harm is done by claiming that the scientific method is going to save us."¹⁹

These diverse views concerning the role of science in social change reflect a serious point of confusion in the planning of general social-science courses. Shall they be developed around the systematic ordering of scientific principles or shall they proceed directly to a consideration of problems in a moral context? Are they appropriately termed

¹⁸ George A. Lundberg, *Can Science Save Us?* New York: Longmans, Green & Co., 1947.

¹⁹ James Bryant Conant, *Education in a Divided World*, p. 121. Cambridge, Massachusetts: Harvard University Press, 1948.

"social science" or are they better described as "social studies"? Has general education, by embracing the term "social science," assumed a responsibility for applying the scientific method to social change, which, by implication, commits it to a positivist approach to human knowledge and society? This is more than the question of whether values can or should be taught; it is the basic question of whether society is to be conceived as a vast mechanism operating in conformity with basic laws which are only to be discovered and applied in order to bring about desirable change or whether it is conceived as infinitely varied and indeterminate, veiled in mysteries through which the human eye can see only dimly.

Concluding Statement

Social science in general education is at present in a stage of growth and experimentation, in which there is much searching for modes of integration that will provide a meaningful synthesis of knowledge concerning human behavior. As it looks to its further development, it must resolve the basic confusion as to whether its function is the inculcation of the scientific method in all aspects of human relations or whether its function is to communicate the widest possible sense of the potentialities in human nature.

THE TASKS OF SOCIAL SCIENCE IN GENERAL EDUCATION

Development of an Awareness of Social Phenomena

All social scientists, regardless of their varying approaches to education, will agree that providing an orderly and meaningful study of social phenomena is a basic task of the social sciences. "Every student should be required," says Sidney Hook, "to become intelligently aware of how the society in which he lives functions, of the great forces molding contemporary civilization, and of the crucial problems of our age which await decision."²⁰ It is, of course, obvious that the social context is a pervasive influence in the life of the individual and that his pattern of life will reflect the extent and quality of his understanding of that context. "The knowledge and insight that the social studies can give," Hook continues, "is necessary for every student because no matter what his specialized pursuits may later be, the extent to which he can follow them and the 'contextual' developments within these fields, depend upon the total social situation of which they are in

²⁰ Sidney Hook, *Education for Modern Man*, p. 88. New York: Dial Press, 1946.

some sense a part.”²¹ By awareness we mean, of course, something more than a simple *description* of social institutions; we mean rather *comprehension* of the dynamic relationships, of patterns of growth and change, and of the interaction between material and ideational forces. General education approaches the communication of awareness of social phenomena at its most significant level, because here the phenomena are viewed in their most complete context and are studied in terms of the larger social concerns and the more comprehensive conceptual frameworks. This means inevitably a study of such broad and significant themes as the processes of culture, the factors in personality formation, the forces that interplay in the distribution of material resources, and the origin, growth, and viability of social and political institutions.

By awareness, then, we mean, not a simple familiarity with isolated data, but rather a comprehension of the facts, concepts, events, and forces as they are found to have meaning within conceptual frameworks. Social science is always under obligation to make clear the assumptions underlying the particular framework within which particular data are considered, and, in the case of the general social scientist, the obligation operates with special force, because what he seeks to communicate is primarily a sense of the total framework and only secondarily the details of the related data. Awareness means, too, an appreciation of the value implications that are inevitably present whenever social situations are under analysis. It means, also, an appreciation of man's efforts to understand and control his social environment. This, in turn, leads into the study of alternative modes of political, economic, and social organization that have characterized man's social history in its varied development and into the study of the insights concerning human behavior yielded by the several separate social-science disciplines.



Development of Critical Intelligence

Awareness of social phenomena — even in the broad sense we have used it here — is by itself not sufficient preparation for the exercise of judgment in the practical affairs of society. One requires, in addition, habits of reflection that enable him to view social situations critically and discriminately. As we have noted, rationalists tend to view this component of critical judgment as the product primarily of intellectual training and discipline, while instrumentalists regard it as a process

²¹ *Ibid.*, pp. 88-89.

of mind plus emotions. But, again, whatever the particular educational approach, all sides to the rationalist-instrumentalist controversy can agree that the task of developing critical intelligence is a legitimate interest of the social sciences, and that, in so far as it can be achieved as an outcome of social-science instruction, it must be sought in the context of meaningful subject matter. Instrumentalists sometimes appear to be suggesting, by their emphasis upon "student-centered" learning in preference to learning that is "subject-matter centered," that critical intelligence can be acquired as a skill which, in application, is general to all subject matter, but, in learning, is divorced from any particular subject matter. At this point they are opposed not only by the rationalists but by some supporters of Dewey's philosophy, one of whom has remarked, "It is naively assumed that by some *hocus pocus* we could teach pupils how to think without permitting them to think about anything."²²

The development of the capacity to make critical judgments is closely linked to an understanding of the scientific method, and, as we previously observed, there are some who anticipate the time when social science will be developed to the point that will permit us to dissolve, through the application of scientific knowledge, our many knotty problems in human relations. In this view, the application of critical intelligence is identical with the scientific method. But the practicing social scientist must necessarily take a somewhat more modest view of the likely result of his work in developing critical intelligence. He is constantly confronted by the fact that his instruction can yield no more than what is justified by the data with which he must deal, and, at the present stage of development, there are vast lacunae in the social sciences, which means that, in helping his student develop the capacity of critical judgment, the social scientist's role is limited to what can be realistically accomplished through the study of particular situations in particular frameworks.

The Communication of a Spectrum of Values

Related to the tasks of helping the student acquire an awareness of social phenomena and of assisting him in developing his powers of critical judgment is a third task, that of stimulating the student's imagination concerning the infinite variety in human potentiality. This is the task of helping the student to discover that line beyond which judgments concerning human conduct become dependent upon unprov-

²² A. L. Threlkeld, "Dr. Dewey's Philosophy and the Curriculum," *Curriculum Journal*, VIII (April 1937), 165.

able assumptions, the point at which science yields to personal subjective preference. It is the task of communicating to the student a sense of how different men in different periods and places have viewed their assumptions and their potentialities for realizing their aspirations.

It is with reference to this task that the alliance between social science and the humanities becomes crucial. The humanities enrich the student's insight into the variety of values and the variety of human experiences, and the social sciences provide systematic conceptual frameworks for the interpretation and interrelating of these values and experiences with the objective data of the material world. This is perhaps another point at which the tendencies implicit in rationalism, humanism, and instrumentalism find a common focus. The instrumentalist speaks in terms of helping the student to realize his wants and appreciate his needs, while the rationalist seeks to communicate an understanding of the factors involved in individual or group behavior. In essence, both approaches lead ultimately to a subjective concern with the meaning of life and to an explication of the values that are related to man's sensing, feeling, and knowing the realities that surround him.

The task of the social sciences is, of course, not one of indoctrinating a particular set of values, nor, for that matter, of even suggesting an order of value preference. There is, however, one value commitment which is inescapable in democratic education; this is the commitment to complete intellectual freedom, the belief that man will be educated only if his mind is free to roam all that science and the arts have to say about human aspirations and potentialities. This means a form of inquiry that does not permit any kind of external authority to shut off avenues of inquiry, and it means, inevitably, an openness and a variety in the educational system, permitting the fullest possible view of the range of human values.

Concluding Statement

The tasks of social science in general education can be said, then, to consist of (a) developing on the part of the student an awareness in depth of social phenomena, (b) enabling him to understand the central facts, events, and forces that operate in the social realm in terms of conceptual frameworks whose value premises and underlying assumptions are made clear, and (c) communicating to him a sense of the infinite variety in human aspirations and in the potentialities for their fulfilment. Social science is, thus, both a study of social laws and prin-

ciples that may provide some guidance to man's mastery of his social environment and a study of the values that give meaning to the social context.

THE CONTENTS AND METHODS OF SOCIAL SCIENCE IN GENERAL EDUCATION

In what manner are the tasks of social science in general education to be accomplished? What are the guideposts that will assist the general educator in the many-sided function of communicating an understanding of individual and group behavior? At the risk of repeating some of the central points already stated, the following might be suggested as offering some points of departure and as raising some warning signals:

The Central Emphasis: Man as a Unitary Organism

Enough has perhaps been said to show that the first requirement of social science in general education is to place the study of the man-society relationship in its fullest possible context. Man is to be viewed as a unitary organism, not as a segmented political-social-economic-psychological-biological animal. This view implies that both the "subject matter" and the "student" are centers of the learning process, the objective being to treat the central concerns of the individual in a fashion that most vitally touches his subjective experience. It is when the study of man is based upon artificial and arbitrary categories that the subject matter becomes abstract and unreal; it becomes concrete and meaningful when it is based upon matters that are of compelling and immediate concern to the individual. The successful management of the general social-science course is thus dependent upon the imagination and skill with which the principles, insights, and methods of the separate disciplines are joined to provide a unified context in which man as a unitary organism is viewed as the central point of emphasis.

Integrating Themes as Frameworks for Synthesizing Subject Matter, Methodology, and Alternative Value Systems

The social scientist is struck by the fact that the central concerns that agitate man's thinking today are not a great deal different from what they have always been. One might cite, for example, such historically pervasive themes as the quest for the "good society," the "just" distribution of material goods, concern with "ideal" norms of human conduct, and the realization of "happiness." These have excited

the interest of philosophers and scientists throughout history, because each does touch immediately and intimately the thoughts and feelings of every person, regardless of time or place. The challenge to planners of social-science courses is the development of integrated frameworks which permit the synthesizing of what can be meaningfully said about such themes, in the light of present-day scientific progress and of historical speculation concerning them. If the theme touches the individual immediately and intimately, the task of showing the relevance of subject matter, scientific method, and alternative value considerations is made less difficult. This is perhaps simply another way of treating what Corey has described as "the unity of learning,"²³ because it seeks to pose significant social questions in a manner that simultaneously involves both intellectual and affective responses in situations that promise a relatively high degree of motivation.

The development of integrating themes as the pivot for social-science instruction need not, however, mean an instrumentalist approach. Rationalists may prefer to seek the integration through the process of intellectual study and contemplation, and humanists through a more direct study of values, and both approaches may be as productive as the treatment of "real-life" problems in the instrumental fashion, so long as the instructional emphasis is upon the wholeness of particular problems and upon interrelating their segments.

Relating the Central Themes to the Student's Experience

Motivation to learn, as we have noted, is greatly increased when matters under study are closely related to the student's experience. He is incessantly agitated by questions concerning the norms of human behavior. What is proper or what is improper in given situations? On what grounds and in what terms are the standards of propriety to be determined? Every social-science instructor sooner or later discovers that he performs best when he is able to relate the subject matter to the student's concern about his own future and his own behavior. For the social scientist the human personality and the social community provide a vast laboratory that abounds with situations in which the student is inextricably involved. So seemingly unimportant a problem as finding a parking space can serve as the learning situation for observing and analyzing such related phenomena as urbanism, law enforcement, cultural change, and the manners and morals of the community. The need is for skill and imagination in integrating

²³ Corey, chap. iii, pp. 58-62.

the insights and in making them meaningful in terms of the student's experience.

The question of "transfer of training" is relevant at this point. However thoroughly organized, formal social-science instruction cannot conceivably cover more than a portion of what one may be expected to know about society; it must rely upon reaching central relationships, the ramifications of which radiate outward to yield, in the end, an operationally useful social perspective. If the integrating theme around which instruction is organized touches the student in a vital way, such learning will have a "circularity," and, while he may not necessarily succeed in transferring a learned pattern of reflection, the student will be able to utilize what he has learned about one central relationship in dealing with relationships that border upon it or that are indirectly connected. Thus, the question the social scientist must answer for himself is not, "Can the student 'transfer' what he has learned in this situation to other similar or dissimilar situations?" but rather, "Has learning about this situation stimulated the student in a way that enables the particular knowledge he has acquired to 'circulate' through other areas of social interaction as they are encountered?" Whether or not circularity is achieved will depend upon how meaningfully the integration is developed and on how skilfully it is related to the student's experience.

The Empirical Approach: Its Necessity and Its Limitation

In studying man and society, one obviously must learn the facts that are relevant to situations under analysis. The aim of education is to communicate those facts that are held to be valid in scientific terms, and the aim of science is to enlarge constantly our factual knowledge. It is the knowledge of empirically-validated facts that provides the basis for intelligent discourse among men, and, if we are to understand man and society, our approach must be empirical and our framework of study must conform to scientific principles. By this means social science in general education seeks to help the student acquire the rudiments of a social perspective that is consistent with citizenship in a free and open society in which knowledge is held to be valid knowledge in terms of principles, none of which claim sanction from nonscientific sources. But the empirical approach must not close out a consideration of values, because without them a social perspective can never be complete or meaningful; indeed, one might argue that the perspective begins to be operationally significant at the point that values are considered. The function of social science, therefore, involves

not only training the student to know when a fact is a fact but also to know when a value is a value and on what grounds one presumes to offer a particular value preference.

The Dangers of "Skepticism, Presentism, Scientism, and Anti-intellectualism"

However much one may disagree with Hutchins' views concerning education, the social scientist sees much that is sound in his warning against what he calls "the cults of skepticism, presentism, scientism, and anti-intellectualism."²⁴ By virtue of its emphasis upon the larger issues and upon the problems of immediate concern, general education courts dangers that can divert it from the patient investigation of complex human phenomena. If the emphasis on scientific method results in the pervasive notion that social science can do for social problems what natural science has done for the control of physical phenomena, the delusion may arise that simple "answers" to complex human problems can be discovered by the application of elementary scientific principles. Similarly, while it is clear that relating learning to personal experience has much value, an exclusive emphasis upon immediate concerns can result in a narrow and limited social perspective. This year's issues are useful teaching tools, but their particular importance is fleeting. To serve its proper function social science must deal with the continuing, permanent, and paramount concerns that underly social relations in all periods and places.

General education, particularly in the instrumentalist view, is much concerned with "attitudes," "feelings," and "emotions." While the importance of such subjective factors cannot be denied, a primary emphasis upon them can result in subordinating intellectual development to other nonintellectual objectives. In the field of the social sciences this tendency can have disastrous consequences; it can transform the function of learning from the pursuit of knowledge to the pursuit of social "adjustment."

Social science in general education is still in a formative period. The future may conceivably yield a science of behavior and a science of society that will justify an educational approach which blends intellectual development with the training of emotions. But, given the present state of social science, such an effort must proceed with great caution in the face of tendencies that urge it to a more ambitious

²⁴ Robert Maynard Hutchins, *Education for Freedom*, pp. 30-38. Baton Rouge, Louisiana: Louisiana State University Press, 1943.

goal than can be justified by what we know about the learning process.

The Need for an Eclectic Orientation

What has been said here concerning the content and methods of social science in general education can be regarded as an elaboration of our earlier assertion that this area "cannot fulfil its role if it is anything but eclectic in its philosophical orientation."²⁵ The work of social science involves an empirical approach but also an awareness of the significance of values and of the need for rational frameworks that may reach out and beyond what is presently justified by our scientifically-validated knowledge concerning behavior and society.

SOCIAL SCIENCE AND EDUCATION IN A DEMOCRACY

There remains to be considered now the relationship between the teaching of social science in general education and the function that such instruction serves in the life of the democratic community. In the final analysis, what justification can be made in behalf of education which is designed to prepare the nonexpert in matters that pertain only to his general life as a citizen and not to his private life as a specialist? If education is to save us from catastrophe, what are the particular points of concern to the social scientist? The following points are advanced as suggestive of certain basic considerations:

The Indispensability of Widespread Knowledge. In our present unhappy world crisis, one fact stands out with terrifying clarity, namely, that the price of ignorance in the modern world is catastrophe. The survival of democratic values demands of every citizen that he have a modicum of insight into how society operates. The growth of technology and the ever-increasing specialization impose the need for greater and greater social interdependence. Science and invention hold the promise of unlimited material progress, but they also hold the threat of unlimited destruction. Whether progress or destruction is to triumph depends upon how quickly and how effectively we are able to advance our collective intelligence in the management of our social life. Social science has a basic function to perform in developing an ever-widening appreciation of the major influences in modern society and of the inevitability of our interdependence. In a democracy every citizen is a participant in the shaping of social policy, whether he chooses to participate actively as a voter or not; his enlightenment is

²⁵ *Supra*, p. 114.

more than a private concern, because the price of his ignorance may be the destruction of the community.

Preparing "Every Man" for Citizenship. The question, "Who is educable?" is an essentially false question for a democracy. Every legally competent adult, regardless of intellectual level, automatically participates as a citizen and is presumed to have at least a minimum of competence to appreciate at least the more basic ideas concerning social processes. The task of the social scientist engaged in general education is to shape materials that permit a form of self-differentiation in which those with keener intellectual ability learn as much as they can and those less qualified as much as they can. In a democracy the functions of leadership and of policy-making are widely diffused over a large number of citizens—workers, managers, farmers, professional men, office-holders. The democratic vitality must be constantly nourished by the training of every citizen in an appreciation of the assumptions and demands of democracy and in an understanding of the basic relationship between the government and the individual.

The Training for Democratic Leadership and for Self-Criticism. It has frequently been observed that one of the weaknesses of contemporary American democracy is the lack of a sufficiently strong and effective body of informed thought-leaders who are capable of providing detached criticism of our national life. While the training of "every man" will enrich the community's appreciation of democratic values, it will not wholly meet the problem of democratic leadership. Education has the further obligation of helping to develop a body of informed citizens whose knowledge of political, economic, and social processes is sufficiently mature—in matters of both a general and specialized nature—so as to provide a continuing source of intelligent and informed criticism. The social sciences quite naturally play a central role in the development of such a group, but, if they are to fulfil this function, they must guard against the dilution of their content so as not to overemphasize the realization of individual subjective needs to the point where the development of an objective perspective concerning the community's interests is subordinated or crowded out.

Achieving Unity and Preserving Diversity. A final word may be in order concerning the value framework within which social science in general education must necessarily operate. There are two profound influences at work in democratic education, one in the direction of community co-operation and harmonious group life based on an awareness of society's interdependence, the other in the direction of each

individual's seeking to maximize his own rewards irrespective of concern for the group. The reconciliation of these two antagonistic tendencies is the basic problem of democracy. On the side of achieving harmony and unity, social science in general education seeks to help the student understand the processes that provide common ground for democratic community living and appreciate the humane values implicit in democracy. But, at the same time, it seeks to highlight the infinite diversities that are tolerable within the democratic framework and to stress those qualities that endow men with their uniqueness as human beings.

CHAPTER VII

THE NATURAL SCIENCES IN GENERAL EDUCATION

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GENERAL STATUS OF SCIENCE INSTRUCTION IN GENERAL EDUCATION

The history of science and science teaching reveals that its major purpose prior to the twentieth century has been the pursuit of knowledge and the preparation of scholars to insure a continuation of such pursuit. Furthermore, the increasing number of scientific discoveries and their commercial and professional uses giving rise to the tremendous growth of applied sciences, such as engineering, has created the need for increased numbers of people to be trained professionally for research and service in the field of science, while others are being trained professionally in the sciences as basic background for work in applied science. This need, as it appears today, will continue and will increase at an accelerating pace. Thus, both because of the nature of the development of science as a field of knowledge and because of the practical uses to which such knowledge can be put, science instruction has been heavily influenced by professional and preprofessional demands.

It is certainly true also that outstanding men of science—for example, Tyndall, Bragg, Jeans, Gamow—have given popular lectures and written popular books in an attempt to interpret science for the layman. Some scientists of the past have given occasional thought to the need for a broader understanding of how science affects or can affect everyday living. In general, however, those interests, so far as they are recorded, appeared late in the lives of such men and such work as was designed to make science meaningful to the average person was not carried on intensively or systematically. The need for such study as a part of higher education has never been as great as

that which exists today because of the greatly increased college population of "nonscience" students.

Science as a body of knowledge and as an aspect of professional and preprofessional instruction has become highly structured and specialized, probably more so than any other field of knowledge. Some of the specific achievements required of science students may be purposeful and planned; some may be the direct result of competition between writers of science textbooks.¹

Even if an investigation should establish the validity of present requirements in particular fields for professional or preprofessional purposes, this would not justify the assumption that either the extent or the kind of achievement required of science students should also be expected of "nonscience" students as a part of their general education.

Bode and his associates have pointed out some of the principal "cross-" or "between-" field inadequacies resulting from the conventional organization of science and have proposed a program of study to deal with certain of them.² A few universities, notably the University of Chicago and Syracuse University, have similarly noted the problem of obtaining a more general competence in the field of science. These institutions have attempted to state requirements, particularly in graduate work, in such a way as to permit science students who want to develop a broader competency to do so.³

The first courses in science for "nonscience" students (general education being a relatively recent term) were based on a survey hypothesis. These courses, stimulated by criticism of narrow field specialization, dealt with the combination of several fields called the physical sciences, the biological sciences, or the natural sciences. Many instructors with such science-survey experience have concluded that the work with students is so thin as to be superficial. A somewhat different plan, the so-called "block and gap" hypothesis, has been developed to overcome this superficiality. In this plan selected topics or problems (blocks) are dealt with intensively with much of the conventional content omitted in the gaps. At the present time most of the science

¹ A. V. Bushkovitz, "A Criticism of the Contemporary Physics Textbook," *American Journal of Physics*, XVIII (May, 1950), 312-13.

² Hendrik Wade Bode and Others, "Education of a Scientific Generalist," *Science*, CIX (June 3, 1949), 553-58.

³ See also, Bernard B. Watson, "Current Trends in the Training of College Teachers," *American Journal of Physics*, XVIII (December, 1950), 553-56; and John Q. Stewart, "The Development of Social Physics," *American Journal of Physics*, XVIII (May, 1950), 239-53.

courses in general education are based on either the older survey procedure or the newer "block-and-gap" hypothesis.⁴

An analysis of various reports on experiences in science instruction in general education leads to the following generalizations:

1. A knowledge of specific facts, laws, and principles of science is considered less important as an outcome of science instruction for purposes of general education than that for professional or preprofessional purposes. Evidence presented in support of this generalization is sometimes indirect; *e.g.*, "coverage is not one of our objectives."⁵ Sometimes stated as an objective of science instruction, the knowledge of scientific facts and principles is generally indicated as a desired outcome but one which is of secondary importance.⁶ A report of a special committee of the American Association for the Advancement of Science also supports this generalization:

Implicit in these written comments [qualifying statements made by respondents to a questionnaire] seemed to be the conviction that it is not necessary for this type of student [nonscience] to be familiar with all of the facts, principles and concepts of physics which are presented to a student in the regular introductory course in physics, but that some physical principles and concepts are more important for this type of student than are others. The majority of comments also seemed to carry the conviction that it is better to have the student master those principles and concepts important for him than to have him cover the whole field of physics in a more superficial manner.⁷

2. Statements of objectives and statements about objectives of science for purposes of general education are much more common in discussions and descriptions of science courses for general education than in courses for scientific professional or preprofessional education.

3. "Scientific method" stated and expressed in many different ways is almost always included as one of the major objectives of science courses for purposes of general education. Science instructors reveal

⁴Eric M. Rogers, "Science Courses in General Education," in *Science in General Education*, pp. 1-22. Edited by Earl J. McGrath. Dubuque, Iowa: William C. Brown Co., 1948.

⁵William E. Cadbury, "A General Course in Physical Science at Haverford College," in *Science in General Education*, *op. cit.*, pp. 23-38.

⁶Sidney J. French, "General Education in Natural Science at Colgate University," in *Science in General Education*, *op. cit.*, pp. 39-57.

⁷L. W. Taylor (chairman), A.A.A.S. Committee on the Improvement of Science Instruction for Purposes of General Education, "Physics Instruction for Purposes of General Education," *American Journal of Physics*, VIII (February, 1940), 49-54.

a confidence that the methodologies of science have something very important to offer the general-education student. Dean French of Colgate University expresses this idea in the following way:

We are coming to believe that the course provides an intellectual experience for the student worthy of the effort it cost the staff. Future efforts must turn more and more in the direction of developing additional techniques for student motivation and more active participation in his own education. If these ends are achieved, fundamental objectives of general education — better understanding and ways of thinking — can be met. Our present experimental effort is only a start in that direction.⁸

There is evidence also that "scientific method" has received increased attention during the past fifteen years because of its importance as an objective of general education. Intensive investigation of its meaning has led to the conviction that "scientific method" should not be narrowly or uniquely interpreted.^{9, 10}

4. There is little agreement concerning the major topics or content to be dealt with in science courses for purposes of general education. Some courses center on topics selected from the standard structure of science and are dealt with more comprehensively than in standard courses, the selection usually being based on the "bigness" of the idea or the extent to which it illustrates some phase of scientific methodology. Some courses center on topics in which a fairly large number of principles or concepts in one or several fields of science are exemplified, for example, the Carolina Bays situation as presented in the Colgate science course.¹¹ Still other courses center on topics illustrating human needs like physical health, housing, and transportation.

5. Practical applications of scientific knowledge, in terms of a happy and useful life, are increasingly included in science courses for purposes of general education. Although this procedure is recognized as desirable by many instructors in both physical and biological sciences, instructors in biological sciences seem to have less difficulty in identifying practical topics or problems than do those in physical sciences. A trend in courses in biological science is to deal with man rather than to deal with selected topics from botany and zoology.

6. There is a growing conviction among science instructors in general education that the way topics are dealt with is at least as

⁸ French, *op. cit.*, p. 57.

⁹ Joseph Schwab, "The Nature of Scientific Knowledge as Related to Liberal Education," *Journal of General Education*, III (July, 1949), 245-66.

¹⁰ Stewart, *op. cit.*, p. 241.

¹¹ French, *op. cit.*, p. 49.

important as the topics themselves. Instructors seem to feel that if the ideas of science and its procedures are important, the topics must be dealt with in such a way that students will recognize other examples and applications of the ideas and procedures illustrated by a particular topic. For example, Alyea¹² of Princeton says,

We want to encourage the student in a like manner to gain confidence in his own intellectual capabilities, so that he himself is willing to make intelligent guesses. In his later life he will be counted upon time and again to make decisions, to make decisions with confidence, and to make them on a moment's notice. He will have gained practice in doing just this sort of thing in the science course which I am proposing.

7. Science instruction for purposes of general education is increasingly providing more opportunity for analysis and discussions by students. The evidence for this generalization stems from the practice of providing more discussion, fewer lectures, and more individual reports and conferences with students. The following quotation describing a part of the procedure of the science course in general education at Boston University is indicative of this trend.¹³

Small groups of students (20 to 25) meet with trained section men, who have attended all lectures, to discuss the material of the lectures and the assigned reading. The section meetings provide opportunity for personal contact between the faculty and students, and permit the faculty to keep in close touch with student comprehension of material and problems arising from it. Small-scale demonstrations are presented in these section meetings, and, where feasible, clear-cut significant laboratory exercises are assigned (p. 172).

SCIENTIFIC THOUGHT AND INSTRUMENTALIST PHILOSOPHY OF GENERAL EDUCATION

The procedures employed by scientists and the assumptions upon which such procedures rest are generally consistent with "instrumentalist" philosophy of general education. This consistency is shown by Taylor's statement in chapter ii (pp. 35-36):

The instrumentalist philosophy of education puts its chief emphasis on the uses of knowledge. The instrumentalist theory of truth works outward from individual experience to concepts and facts which are continuously reaffirmed or denied by subsequent experience. Facts [concepts and theory] which are denied by further experience become false, those confirmed con-

¹² Hubert N. Alyea, "The Single-Science Course at Princeton University," *Science in General Education*, *op. cit.*, pp. 124-39.

¹³ Wesley N. Tiffney, "The Science Program in the Boston University General College," *Science in General Education*, *op. cit.*, pp. 170-84.

tinue to be true. There are various ways in which experience itself can be made more precise in its detections of fact and in which a variety of methods can be drawn from observation and induction to safeguard the individual from undue error. Truth in this system is in process of being created from moment to moment, and the perspective from which one looks at the truths stated by others or created by one's self has a great deal to do with the truth which one finds. . . . For the instrumentalist, there are no absolute truths or values. . . . In place of a fixed aim or fixed principles for education, the instrumentalist position is that aims and principles are to be defined in terms of the growth of maturity and of personal qualities within the student and not in terms of an intellectual discipline for training the reason.

For the scientist, "uses of knowledge" would mean the application of principles and the application of theory and concept in the discovery of new knowledge. "Working outward from individual experience to concepts" means, for the scientist, the development of those concepts, definitions, and basic assumptions which are continuously reaffirmed or modified on the basis of logical fertility, multiple connections, permanence and stability, extensibility of constructs, causality, and simplicity and elegance.¹⁴ Truth, from the standpoint of concepts and postulates in science, is always in the process of being created. Max Born described the process in this manner:

I believe that there is no philosophical highroad in science, with epistemological signposts. No, we are in a jungle and find our way by trial and error, building our road *behind* us as we proceed. We do not *find* signposts at crossroads, but our own scouts *erect* them, to help the rest. . . . My advice to those who wish to learn the art of scientific prophecy is not to rely on abstract reason, but to decipher the secret language of Nature from Nature's documents, the facts of experience.¹⁵

That the procedures employed by scientists and the assumptions upon which such procedures rest are consistent with instrumentalist philosophy is hardly a strange coincidence in view of the influence of John Dewey and others responsible for instrumentalist philosophy who base their views quite definitely upon the "method of science."

THE CHARACTER OF SCIENTIFIC METHODOLOGY

Schwab¹⁶ and some other writers on the methodology of science have been concerned about the prevailing practice of assuming the

¹⁴ Henry Margenau, "The Metaphysical Requirements on Constructs," *The Nature of Physical Reality*, chap. v. New York: McGraw-Hill Book Co., 1950.

¹⁵ Max Born, *Experiment and Theory in Physics*, p. 44. London: Cambridge University Press, 1943.

¹⁶ Schwab, *op. cit.*

validity of any single group of ideas or principles as the scientific method. This concern, based on a recognition of varying points of view among the sciences and scientists with regard to interpretation and procedure, warns against particular dogma or doctrines in scientific method. However, there are facets of similarity as well as differences in different scientific interpretations and procedures. Some procedures have become common practice in the investigation of problems in many fields—for example, sensing relations from evidence, formulating hypotheses, and testing hypotheses. This practice is not assumed to represent the whole methodology in a particular field any more than one would assume that science is completely an inductive procedure with no deductive aspects.

Whether a person is justified in labeling the practice of "hypothesis thinking" as a unique aspect of scientific method is debatable; what is not debatable is the fact that historically this practice has often prevailed where the subject matter of the investigation consisted of natural phenomena. To say that such a practice is now too general to be made the subject of argument with respect to its relation to scientific method may be true as an aspect of advanced scientific education—say, in physics, or biology. But the fact that people generally do not adequately employ hypothesis thinking in connection with everyday problems makes the procedure valid for purposes of general education. On the other hand, such a specific educational practice as insisting upon the acceptance of "operationalism" in formulating definitions may properly be called dogma. But in this situation it would be just as erroneous to fail to indicate instructionally the ways in which an operational definition is helpful both "in and out" of scientific context as to ignore the role of concepts in a consideration of definitions. Margenau states the issue:

The interplay between the two types [of definition] makes science a going and self-correcting enterprise. Without epistemic definitions science degenerates to speculation; in the absence of constitutive definitions it becomes a sterile record of observational facts, and its formulas take on the character of medical formulas. Physical laws may be regarded as mediators between the two types of definition for specific quantities. In the development of a science, the discovery of a law often leads to new constitutive definitions, and, conversely, a new definition of this type may generate a law.¹⁷

Similarly, the presence of the several interpretations of causality is not a sufficient reason for neglecting to consider causation at all.

¹⁷ Margenau, *op. cit.*, pp. 27-28.

In view of the familiar mistakes in assigning cause-and-effect relations, interpretations of causality may well be stressed in programs of general education.

It seems to be assumed that the essence of scientific methodology and procedure is learned concomitantly with the facts and principles of science in well-structured science courses for professional or pre-professional purposes. In beginning science courses relatively little attention is given explicitly to scientific procedure as such, more consideration being given to such methodology in advanced undergraduate and graduate courses. There seems to be the implicit assumption also that science students, particularly at the graduate level, develop significant concepts concerning the meaning of science through their research seminars, research investigations, and informal discussions. Although this assumption appears to be reasonable from the standpoint of the student specializing in science, its validity with respect to his mastery of scientific methodology in comparison with his mastery of science facts and principles has been questioned at various times. For example, Cadbury of Haverford expressed the opinion that "tacitly we are inclined to assume that the science student will come to understand science during his study of it — an apparently reasonable assumption but not necessarily true."¹⁸

It appears, therefore, from the standpoint of the opportunity for students of general education to understand and practice the meaning of scientific methodology, that a different assumption must be made. This assumption, increasingly accepted by instructors in science for general education, is that explicit and direct attention should be given to developing the meaning of scientific methodology as it applies to the general student. The difficulty encountered by most science instructors in general-education courses is not so much the acceptance of the objective but the identification of effective ways of realizing it. One of the most frequent procedures employed in this connection is to introduce outstanding historical examples of scientific procedure and methodology. The weakness of the procedure lies in the fact that students too frequently do not have an opportunity to practice the essence of the historical example in problems which are new to them. One of the major problems in such situations, particularly for purposes of class discussion, is the attainment of a basis of accepted fact which will enable all of the class to engage in "scientific-method procedures."

¹⁸ Cadbury, *op. cit.*, pp. 27-28.

DETERMINING THE CONTRIBUTION OF SCIENCE
TO GENERAL EDUCATION

Meeting Individual Needs as a Basic Contribution. What does science or scientific thought have to offer the student of general education? An hypothesis may be obtained by analogy from science instruction designed for scientific professional and preprofessional preparation. In such instruction, the assumption is clearly made that the work should meet the student's needs as a scientist or as a worker in the applied sciences. The analogous situation for the student of general education is that science instruction should prepare him to meet his needs in living a happy and purposeful life. This hypothesis has been expressed in the following terms by a representative professional group: "The purpose of general education is to meet the needs of individuals in the basic aspects of living¹⁹ in such a way as to promote the fullest possible realization of personal potentialities and the most effective participation in a democratic society."²⁰

The fact that people have different needs and meet their personal and social needs in different ways means that no fixed formulas can be prescribed for the appropriate satisfaction of individual needs. How people generally are to be prepared to meet their needs has been succinctly expressed in the authoritative report noted in the preceding paragraph.

Since the total situation in which the individual lives and grows is constantly in the process of change, novel adjustments are called for—hence . . . the insistence upon the view that *thinking* is the method of securing adequate control over experience.²¹

The most direct intellectual contribution to meeting personal needs in the basic aspects of living appears to be competence and a sense of security in making decisions regarding everyday problems, including relations with other people. Eric Rogers has stated this point, "Perhaps, the furthest we can hope to go [in general education] is to encourage a scientific attitude and critical thinking in general life."²²

¹⁹ "Needs" here refer to three major kinds of problems—personal, economic, and sociocivic.

²⁰ Commission on Secondary-School Curriculum, Progressive Education Association, *Science in General Education*, p. 23. Report of the Committee on the Function of Science in General Education. V. T. Thayer, Chairman. New York: D. Appleton-Century Co., 1938.

²¹ *Ibid.*, p. 22.

²² Rogers, *op. cit.*, p. 7.

The definition of the purpose of general education given above, namely, "to meet the needs of individuals in the basic aspects of living," is consistent with two major criteria of instrumentalist philosophy: "What kind of knowledge and experience can contribute to a more abundant personal life?" and "What kind of knowledge and experience can contribute toward a stronger and freer social order?" The report of the President's Commission on Higher Education presents a statement of the goal of higher education which is also consistent with instrumentalist philosophy.

The first goal of higher education for democracy is a full, rounded, and continuing development of the person. The discovery, training, and utilization of individual talents is of fundamental importance in a free society. To liberate and perfect the intrinsic powers of every citizen is the central purpose of democracy, and its furtherance of individual self-realization is its greatest glory.²³

The Contribution of Science Instruction to Meeting Individual Needs. The contribution of science and scientific thought to the problem of general education, seems, therefore, to be of two kinds: the use of the types of analysis and critical thinking employed in scientific activity and the application of scientific generalizations themselves, particularly as these contributions apply to meeting needs in the basic aspects of living.

The contribution to the student of general education in the form of scientific generalizations (*e.g.*, conservation of energy, genetics, concept of probability) is greatly enhanced when the factual generalizations of science are translated into those forms most useful to the person in meeting his needs. For example, the law of conservation of energy expressed in its scientific form can be extended in many ways, one of which might be: "The development of machines which use energy from inanimate sources provides modern society with an enormously greater amount of power per capita than was ever before available." Similarly, in connection with generalizations of genetics, students should recognize the fact that it is as important to understand what is not known or what is doubtful as it is to know what is known and what can be predicted by the laws of inheritance.

A second assumption concerning the contribution of science and scientific thought to the problem of general education is that the kinds of analysis, thinking, and procedure typically employed in sci-

²³ *Higher Education for American Democracy*, Vol. I, *Establishing the Goals*, p. 9. Report of the President's Commission on Higher Education. Washington: Government Printing Office, 1947.

entific activity can be extended and translated into problem-solving activities in which students should engage when endeavoring to meet their immediate and future needs. The validity of this assumption is demonstrated by the fact that accepted and desirable procedures of critical thinking and problem-solving employed in meeting everyday needs are the same as those practiced by scientists when attacking scientific problems. This assumption does not mean that competence in the use of critical thinking and problem-solving techniques in connection with scientific problems transfers automatically to other problems, or vice versa.²⁴ The extent to which such competence becomes general depends upon the opportunity to practice critical thinking and problem-solving in a wide variety of situations.

Values, Ethics, and Scientific Procedure. Almost all activities pertaining to the meeting of individual needs in the basic aspects of living involve the problem of values and ethics. Considerable effort has been expended during the past few years by a number of scientists as well as nonscientists in an effort to answer the question, "Can science validate a system of ethics and values?" All of these efforts appear to give negative answers. In each one some single value judgment, such as "the greatest good for the greatest number" or "freedom for discovery," serves as a starting point. Science is not, however, unique in this respect. Rather, it is apparent that no recognized branch of knowledge can validate a system of values and ethics. A logically sound viewpoint has been stated by Lundberg:²⁵

We have taken the position that science as such is ethically neutral. Where, then, is man to look for ethical guidance? Traditional sources — assorted philosophers, theologians, seers, sages, poets, and humanists — have ready answers in terms of their respective faiths. The viewpoint here expressed does not contemplate the suppression of these voices. Our position has been that their formulations, together with those of the scientists and other people, should be regarded as hypotheses to be tested, or to be adopted as a preference, rather than as conclusions to be accepted because of the prestige, eloquence, piety, or dramatic talent of the spokesmen. Now, science is generally conceded to be a highly effective method of testing hypotheses, and scientists have always warned against mistaking hypotheses for scientific conclusions. We have suggested that social scientists especially, both at home and abroad, should heed this advice and avoid attempting to endow themselves, whether as professors or as public officials, with authority to tell man (a) what he should want as well as (b) how to achieve his goals (p. 273).

²⁴ See chap. iii of this yearbook.

²⁵ George A. Lundberg, "Can Science Validate Ethics?" *Bulletin of the American Association of University Professors*, XXXVI (Summer, 1950), 262-75.

Is science instruction to play any role with regard to values or sets of values? Margenau²⁶ has framed a point of view which indicates the relation between scientific theory as it pertains to natural phenomena and value assumptions as they pertain to the desires, wishes, and demands of individuals:

In the exact sciences success follows upon the completion of three stages of work: first, postulation of general principles; second, logical or mathematical deduction of specific theorems from the postulates; last, the empirical verification of the specific predictions. The order of these three need not always be the same.

Ethics can be a science with the same threefold structure. Its postulates, different though they are from those of the sciences, are no more sacred and no less binding to the individual who accepts them than are the axioms of arithmetic. The implications of this view are many. Ethics can disclaim all essential connection with religion, though it may still rely upon religion as a reinforcing agent. Also, the act of dedication of an individual to a set of ethical postulates may be psychologically very close to a religious experience. Immoral acts could be viewed as irrational and inconsistent rather than offenses against a divine or human order. The teaching of ethics would have to be completely overhauled.

According to this view the assumptions or the postulates in any system of ethics and values would bear the same relationship to specific experiences of the individual (both direct and vicarious) which the concepts and assumptions or postulates in scientific theory bear to observable phenomena. Furthermore, this viewpoint indicates that all organized subject disciplines as well as other sources can formulate and present assumptions as part or parts of a system of ethics and values but that it is the responsibility of the individual to decide on a consistent and rational basis which value postulates and assumptions are best for him. This viewpoint further implies that science instruction as well as instruction in other fields can develop those situations which give students practice in identifying the value assumptions or postulates implicit in various courses of action and decisions. It would also seem to be appropriate and logical instruction when the student is assisted in identifying the implications of his value assumptions and is helped to determine what constitutes consistency with experience so that he may be able to judge the acceptability of his value assumptions.

²⁶ Henry Margenau in F. S. C. Northrup's "The Physical Sciences, Philosophy, and Human Values," *Physical Science and Human Values*, p. 116. Report of the Princeton Bicentennial Conference on the Future of Nuclear Science, 1946. Princeton, New Jersey: Princeton University Press, 1946.

The viewpoint suggested by Margenau becomes significant to the scientist in its relation to authoritarianism. Authoritarian attitudes are most likely to be associated with an uncritical acceptance of value assumptions and postulates of ethics and of procedures involving such assumptions. The scientist's rejection of authoritarianism, therefore, can result in an ambivalence for students whose value assumptions rest on an authoritarian basis. The hypothesis stated by Margenau provides a means of resolving the dilemma and an avenue away from authoritarianism.

OBJECTIVES OF SCIENCE INSTRUCTION FOR GENERAL EDUCATION

The objectives of science instruction for general education here presented consist essentially of a number of assumptions whose validity is based to some extent on the generalizations concerning the present status of science instruction in general education and to some extent on instrumentalist theory. No attempt is made to outline a specific course in science for purposes of general education; such detail as will be given consists of illustrations designed to give meaning to those objectives identified as appropriate for general education.

The Role of Objectives in Science Instruction

Selection and Development of Experiences. Objectives are the essential basis of selecting or developing activities and experiences for students in science instruction. Objectives stated for this purpose are most effective when they indicate what students should be able to do and the ways they should be changed by experiences in science courses. Generally speaking, objectives are not so stated — instead they are often generalized and not sufficiently specific to give definite directions for the determination of experiences students should have. The assumption is often made that objectives of instruction, for science courses or other courses, are primarily useful for testing and evaluation. The problem of selecting or developing experiences for students is the same as that of developing activities for evaluation or testing devices: In the former, the procedure is to find those experiences and activities which give the student practice in doing the things expected of him; and in the latter, the procedure is to put the student in the same or similar situations to determine whether he has developed the expected competency.

Instruction Based on Objectives. A second assumption is that objectives as statements of intentions should be taken seriously. An inspection of the day-by-day science instruction for general educa-

tion often reveals that such activity has little relation to the stated objectives; and many instructors erroneously assume that the outcomes represented by the stated objectives result from concomitant learning. On the other hand, objectives are sometimes "too ambitious," particularly for one course in science. Science instructors should specify only those activities and procedures which students should be able to deal with successfully as a result of the course.

Relatedness of Objectives. A third assumption about objectives, stated in terms of the desired changes in the students, is that they simply represent parts of the total change desired. Thus, statements of objectives in terms of knowledge to be acquired, point of view in the interpretation of ideas, the extension of information by application to new problems, problem-solving ability, modified interests and attitudes are assumed to be related. Corey, in chapter iii, has indicated, "Because learning involves the whole individual, . . . a psychologist regards with some skepticism a long list of general-education objectives. . . ." In this connection, also, it is noted that instructors sometimes argue as to whether a particular change in the students which is recognized as an objective of a course represents a skill, an ability, or knowledge. The question of whether the things that students are expected to be able to do as a result of instruction are to be identified as skills or abilities or interests or attitudes is important, but it cannot be answered at the present time in terms of psychological knowledge. The significance of the query lies in whether students can do the things called for in the statements of instructional objectives.

The basic assumption in the formulation of objectives of science instruction is that the understanding and use of scientific procedures in meeting needs in the basic aspects of living (problem-solving) is the most significant contribution of science instruction in general education. Obviously such understanding and use cannot occur in a "vacuum"—it must occur in the context of problems, facts, and principles. Therefore, a second major assumption is that the problems, facts, and principles in which the understanding and use of scientific procedures is to occur are those most directly involved in the basic aspects of living. Because of the number and variety of such facts and principles, it is also assumed that the specific problems to be selected (thereby identifying certain facts and principles) depend upon the student's background and interests as well as upon available instructional resources. It is also assumed that the student will be assured of both increased opportunity to engage in rational problem-solving activity, because of his ability to do so, and increased enjoy-

ment and interest resulting from scientific interpretations of events and phenomena. It will be noted that the elements of this assumption are directly related, since sound scientific interpretation not only determines the way in which problems are dealt with but often determines the formulation of the problem itself. Such relatedness should be kept in mind in considering the two following groups of objectives, those dealing with interpretation and those involving problem-solving.

Objectives Dealing with Interpretation

Observation and Terminology. The principles and concepts of science, as well as its general method, are anchored solidly to the starting point of observation and terminology. Operational procedure is of clear-cut value for obtaining desirable records of observation and definitions of terms to be employed in interpretations and statements of problems. Present-day emphasis on semantics, with its many illustrations of the difficulty of giving precise meaning to words, is a further indication of the significance of operationalism. But, as Margenau points out, a strict adherence to operational process limits the role of concept and construct.²⁷

As an objective, the ability to make accurate records of observation and to use accurate terminology may mean that students think in terms of the processes or operations actually occurring when a particular verbal symbol is used. They should also be able to determine when descriptions contain concepts. They should consider this problem particularly in their examination of interpretations made by other persons, this being an effective method of discovering how words and terms are subject to description in multiple operations. They can also recast statements which more nearly represent operational terms and/or they can attempt to discern which of several given interpretations is the more nearly operational and whether or not it involves concepts and constructs.

Horton has given an illustration of kinds of questions that can be raised in instruction related to this objective. Considering the statement, "Tea is a pleasanter drink than coffee," he comments:²⁸

²⁷ *Ibid.*, chap. v.

²⁸ Clark Horton, *Achievement Tests in Relation to Teaching Objectives in General College Botany*, p. 36. Sponsored and published by the Committee on the Teaching of Botany in American Colleges and Universities of the Botanical Society of America. Bulletin No. 120. Wellesley, Massachusetts: Botanical Society of America (Harriett B. Creighton, Wellesley College, Secretary, 1950-51), 1939.

The person who has a well-developed tendency to regard words as but symbols which imperfectly represent reality will make comments such as the following: "Of all of the beverages that go by the name of *tea*, which is meant? What is referred to by *coffee*? What kind of coffee? How strong? What is meant by *pleasanter*? If *pleasanter* means "liked more times by more people" and we can satisfactorily define *liked* and if tea and coffee are so defined that a particular constant thing is referred to, then it is a scientific question and can be investigated (p. 36).

An exercise which would provide practice in distinguishing between various descriptions of natural phenomena is the following:²⁹

Consider the following statements:

1. Inheritance takes place in plants.
2. Plant characteristics are transmitted from parent to offspring.
3. The characteristics of plant B, grown from the seed of plant A, are the same as those of plant A.
4. The presence, arrangement, and shape of parts of plant B, grown from the seed of plant A, are the same as those of plant A.

Which one of the above statements is the most nearly a record of observation? Which one involves a major concept? Can any one statement be said to be more or less true than the others? Are there advantages in using any one of the four statements in preference to another? If so, which one? Why?

Relativity of Theory and Concepts. One of the major contributions which science instruction can make to a person's need for a satisfying world picture and a workable philosophy of life is the idea of relativity of theory and concept. There are many classical and clear-cut situations in science that serve to illustrate the scientist's interpretation of concepts and how he evaluates them in terms of such criteria as logical fertility, multiple connections, stability, extensibility, causality, and elegance.³⁰ Some familiar examples are the theory of the solar system, hypotheses concerning the origin of the earth, the gene theory, and the concept of energy itself. Students attaining this objective will recognize the difference between experimental evidence and assumption in scientific theory and hypothesis. They will be able to indicate how the same evidence can be used to support alternative assumptions and will recognize the fact that a set of postulates or assumptions evolved to explain phenomena are subject to change in terms of the appropriate criteria. An understanding of scientific

²⁹ "Final Progress Report of the Natural Sciences Committee, Co-operative Study of Evaluation in General Education," Appendix E, p. 5. Washington: American Council on Education, 1950. (Mimeographed.)

³⁰ Margenau, *The Nature of Physical Reality*, op. cit., chap. v.

concept and theory means that students will identify inductive and deductive aspects of thinking and will realize that an assumption in one hypothesis, or a deduction, may be the hypothesis itself in another situation.

The relativity of theory and concept would be incomplete as an objective if confined to strictly historical or purely scientific ideas or situations. Thus, students may identify value assumptions in such controversies as euthanasia and vivisection. Here they can point out value assumptions as postulates subject to examination by each individual (just as scientific postulates are) and can understand that the acceptance of such postulates by the individual is in terms of consistency (and other appropriate criteria) with his known experience and not because of the prestige, eloquence, piety, or dramatic talent of a person advocating or rejecting such postulates.

An illustrative exercise in a unit on genetics, for example, is the following:³¹

All of our present-day knowledge can be explained equally well by a group of assumptions made by Mendel or by the assumptions made by present-day geneticists. . . . [Organize in two separate groups those assumptions made by Mendel and those assumptions of present-day geneticists which constitute an explanation of facts of genetics and heredity.] *Taken as a whole*, in what ways do the assumptions made by Mendel differ from those made by present-day geneticists? Are Mendel's assumptions, *taken as a whole*, more or less true than those of present-day geneticists? How would the scientist answer this last question? What does truth [in this connection] mean to the scientist?

Cause and Effect. The scientist is fully aware that the interpretation of natural phenomena on a "cause-and/or-effect" basis has resulted in many errors and misunderstandings. Many scientists employ the more cautious statements of relationships or associations. In the biological and social sciences, particularly, caution is demanded in the assignment of cause or effect in view of the likelihood of multiple causation.

The importance of cautious "cause-and-effect" thinking is also demonstrated by the fact that propaganda techniques are often based on chains of statements which begin by noting some remote association and finish by claiming that a particular person or policy is the cause of a good or bad effect.

Valid interpretation both of direct observations and of recorded

³¹ Final Progress Report of the Natural Sciences Committee, "Co-operative Study of Evaluation in General Education," *op. cit.*, Appendix E, p. 5.

data means that students should recognize that single observations or single items of recorded data are seldom adequate for imputing cause and effect. Increasingly they should think in terms of relationships, particularly in connection with data likely to involve multiple relations, and they should manifest a sensitivity regarding the validity of any statements containing the words *cause* or *effect*.

An example of an exercise requiring consideration of cause-and-effect relations is the following:³²

Consider the following statement: Lamarck would say that because we use our fingers more than our toes and because our fingers are longer than our toes, the use of our fingers causes their greater length.

In what way is the reasoning in the above statement like that in the following example:

Colds are more prevalent in winter than in summer. Relative humidity in our homes is lower in winter than in summer. Therefore, it is the low relative humidity that causes colds.

What is the fallacy in the "colds-humidity" conclusion? What is a similar possible fallacy in the reasoning used by Lamarck? What is such reasoning called? Develop several other examples of such faulty reasoning.

Teleology, Plan, and Order. Interpretations of natural phenomena are often based on the teleological assumption of a purpose and plan in organized life and the implicit assumption that human intelligence and purposefulness may be ascribed to plants and animals. A similar kind of interpretation assumes that scientific principles "exist in nature," waiting to be discovered by someone. As an outcome of general education, students should be able to identify assumptions of teleology, plan, and order in nature when formulating their own interpretations of natural phenomena or when judging the validity of interpretations made by others. They should also recognize that such assumptions are needless and that man's concepts, theories, and scientific generalizations or principles are more nearly "within" the evidence.

The following exercise pertains to teleological assumptions:³³

Consider the following statements:

1. The turtle develops top and bottom shells to protect it against its enemies.
3. Giraffes have developed long necks to be able to reach leaves on high plants in order to avoid competition for food with other animals.

³² *Ibid.*, p. 4.

³³ *Ibid.*, p. 4.

What is the common assumption in each of the above statements? Is there any evidence to support this assumption?

Sampling and Extrapolation. Cautious thinking demands care in the extension of data either from a specific item or from a series of specifics to a generalization or from a generalization to other specifics. A lack of caution in drawing a conclusion from a single case or too few cases has led to erroneous conclusions regarding many personal and social problems. Such extension may be either on the basis of time, within a particular set or category, or from one species to another. One of the most significant ideas in this connection is normal variation, in which misinterpretations are made of measures such as average values of body temperature and body weight. Students should be able to formulate the specific assumptions which would have to be true if interpretations involving sampling or extrapolation are to be valid.

Reasoning by analogy represents a common way of extending data to new situations. The role of analogy in the thinking process is, in a strict sense, restricted to the formulation of hypotheses; it does not apply to conclusions, where the probability of the hypothesis depends upon the extent of correspondence between a specific situation and the one to which the evidence is extended by analogy. Schwab has given an illustration of "checks" which should be imposed.

By linking the biological organism and society as two examples here, there is no intention of spinning a loose analogy whereby what is found true of biological organisms is also alleged of societies. Before such analogy can be taken seriously, it would have to be shown that the relations of parts to the whole in each are substantially the same in three respects: (1) the extent to which each part's existence and activity are made possible by and subordinated to the whole; (2) in respect to the kinds of activities which are subordinated; (3) in respect to the nature of the relations which bind the parts to constitute the whole. These similarities have not been demonstrated and, as far as the author can see, do not exist.³⁴

Students can show the assumptions made in the extension of the data by analogy. The following illustration represents one way in which students might analyze statements based on reasoning by analogy:³⁵

³⁴ Schwab, *op. cit.*, p. 258.

³⁵ "Final Progress Report of National Science Committee," Co-operative Study of Evaluation in General Education," *op. cit.*, Appendix E, p. 7.

1. Just as tallness is a dominant characteristic in peas, a pod-bearing plant, so it is also a dominant characteristic in beans, also a pod-bearing plant.
2. Just as it is possible to predict percentages of purple and white kernels of corn, so it is also possible to predict the percentage of tall and short pea plants.
 - (a) What kind of reasoning do these statements represent?
 - (b) What is the principal type of weakness in this kind of argument? What assumption must be made in each statement?
 - (c) Do either of these examples have this weakness? (It is assumed, of course, that students would make such judgments and conduct such analyses on the basis of knowledge background of genetics and heredity.)

The General Interpretation Process. The general principles of interpretation which have been given above are not all-inclusive but do indicate the major safeguards in interpretation as the scientist employs them. The general objective toward which all of these concepts apply might be called the ability to make accurate interpretations of data. Horton ³⁶ has formulated a general statement of the meaning of "interpretation" as the scientist applies it.

If the interpreter has arrived at the point of accepting data, he then proceeds to see what is established by the data and by the data alone. If presented with data showing the amounts of carbon dioxide released by an organism at various temperatures, he may be able to say, "It is apparent that the rate of carbon dioxide released increases as temperature rises in this plant, under these conditions, at this time"; or if the data on water loss are such that, "This plant has a higher transpiration rate than this other plant under these conditions," etc. Generalizations are not possible. These statements may be little more than paraphrases or verbalizations of data already presented in description, table, graph, or photo. He cannot say "none" or "never" or "all" or "always" or "usually" or "probably." He can only say "thus and so did happen under these conditions." Or, he can deny that certain "always" or "never" statements are true. The outstanding characteristic of conclusions possible at this state of interpretation is that they do not go beyond the data given.

The question arises as to whether these statements are inferences. If so, are they really valuable inferences? Are they the kind of inferences that teachers want students to draw from data? Do they involve anything more than is involved in the ability to read or to paraphrase the facts given? It has been argued that such statements are not significant inferences; and that they represent a relatively low level of interpretation. It is nevertheless true that scientists value this ability to hold rigidly to the data given, to recognize what the data reveal and to avoid generalization unless generalization is

³⁶ Horton, *op. cit.*, pp. 27-28.

accompanied by an awareness that the interpretation does go beyond the data. Perhaps it is the ability to refrain from unwarranted generalization and other unsound conclusions that is significant and the valued behavior at this point.

When the scientist has held himself rigidly to interpretations adequately supported by the data, if they may be called interpretations, he may then bring to bear upon it his past experience. If he already holds certain hypotheses in the area of the experiment, he may recognize that the results of the experiment contradict, or weaken, or strengthen, or force revision of these hypotheses. Also, when the interpreter brings experience to bear, he may recognize that if these things (results of the experiment) are true, because of other things which he knows also to be true, it follows that thus and so is probably true. For example, if it is known that the oxygen concentration of the water of a certain river in which algae are abundant is considerably higher on sunny days than on cloudy days, and is higher during the hours of sunlight than during the hours of darkness, the interpreter may also recall certain known facts about light and photosynthesis and may arrive at the inference that the variations in oxygen content of the water are probably due to the variations of the rate of photosynthesis in the algae. This clearly goes beyond the data but is in the nature of a promising hypothesis. It is this giving of significance to the data in an area beyond the experiment that constitutes meaningful inference. It is apparent that other interpretations, or hypotheses to account for this fluctuation of oxygen content, might be advanced, and that these hypotheses might be judged by the interpreter to have varying degrees of probability of truth, or might prove to be problems for further investigation.

Thus, there appear to be two distinct kinds of behavior in the interpretation of data, once the data are accepted, that scientists hold to be desirable: (1) ability to adhere rigidly to the data and to reject any interpretation which goes beyond, or is contradicted by the data; and (2) ability to draw meaningful inferences from data, when *meaningful inference* is used to refer to interpretations which go beyond the data but which appear highly probable in the light of other facts known to the interpreter. Although these behaviors may appear to be contradictory when an attempt is made to state them in words, nevertheless, they may occur almost simultaneously² in the mind of a skilled interpreter of data.

The objective dealing with accurate interpretation of data is taken to mean that students should be aware of what they bring to the data in making interpretations. Often what is brought to bear on the data are fallacious assumptions with regard to the meaning of the terms, erroneous cause-and-effect relationships, assumptions concerning teleology and plan in nature, and assumptions involving violation of reasonable sampling and extrapolation. An important outcome of general education will have been achieved if students will have devel-

oped a tendency to recognize those things they do bring to data (observations, recorded evidence, and any other type of phenomena).³⁷ Whether this tendency exists with regard to everyday data and living will, of course, depend directly upon the opportunity for students to practice making such interpretations as a part of instruction. Thus, to recognize what one brings to bear on data pertaining to the behavior of gases at different temperatures is relatively easy, but similar recognition of what one brings to data involving aid to China, recognition of Spain, or the policies of General MacArthur is likely to be quite difficult for a student without previous practice in dealing with similar problems.

Authority and Authoritarianism. Changed attitudes which may be anticipated as outcomes of science instruction in general education have been stated in various ways. Most frequently, the attitudes which are desirably sought as outcomes of science instruction have been identified with physical health, tolerance toward other races, conservation of natural resources, and the international nature of science. Although the development of desirable attitudes in relation to the subjects mentioned is generally considered worth while, there is a possible danger in the practice of stressing specific attitudes on specific issues. This danger depends on how well informed the person is regarding the subject under discussion and on the extent to which he employs sound principles of interpretation in dealing with the information he has and that which he can obtain. The important point is that the student should be able to identify the assumptions involved in whatever attitudes are being considered and to take steps to appraise the validity of such assumptions.

One of the more basic attitudes, and one which is directly involved both in the approach of science and in scientific thinking, is concerned with the role of authority in science as a field of study and with the nature and force of authoritarianism. Although the scientist often relies on authority as a source of facts or evidence, he consistently invokes the appropriate criteria to evaluate the reliability of the source of authority from which evidence is sought.

Authoritarianism, on the other hand, whether exemplified in the actions and attitudes of a government official, or by the head of an institution, or by an instructor in the classroom, is predicated on the general acceptance within recognized boundaries of specified courses

³⁷ Eugene R. Smith, Ralph W. Tyler, and Others, "Aspects of Thinking," *Appraising and Recording Student Progress*, chap. ii. New York: Harper & Bros., 1942.

of action and the evaluation with which these actions are proclaimed. It usually means that such acceptance is to be made on the basis of piety, age, or prestige, although these may be buttressed by the promise of reward or the threat of punishment. The principal assumptions in authoritarianism are that freedom to bring intelligence to bear on a problem is dangerous, that people are not competent to arrive at decisions regarding problems encountered in everyday living, and that specific courses of action should be worked out by specially designated people and prescribed for other people.³⁸

Most scientists are aware of the constant threat of authoritarianism. Such awareness does not, however, insure the changes in instructional practices which might enable students to distinguish between authority and authoritarianism and also to examine carefully the nature and implications of authoritarian procedures.

Student behavior based on an understanding of the difference between authority and authoritarianism may be observed when an authority or an expert is being regarded as a *source* of evidence or of suggestions for *alternative* courses of action in connection with a problem-solving activity. When using such sources of information, however, the student will not assume that the source is infallible or that a particular course of action must be adopted.

In view of the assumption that the student should not consider any authority or expert as infallible, it is important that he acquire the ability to evaluate the reliability of different sources of information. This ability is assumed to mean that the student can and does apply the following kinds of questions when considering the reliability of a source:³⁹

1. Do the statements made by the source contain specific information or data that may be verified?
2. Do the statements present evidence?
3. Do the statements contain references?
4. What is the training of the author?
5. Has the author done research in the field represented by the statements?
6. Is the author writing on a topic out of his field?
7. What people does the author cite as authority? What work have they done in the field?

³⁸ H. M. Kallen, "The Discipline of Freedom," *The Education of Free Men*, chap. xv. New York: Farrar, Straus & Co., 1949.

³⁹ Adapted from "Final Progress Report of Natural Science Committee, Co-operative Study of Evaluation in General Education," *op. cit.*, Appendix E, p. 10.

8. What is the reputation of the publisher of the statements?
9. Are conclusions made by the author consistent with the principles and concepts of science (or any other field) as you understand them?
10. To what extent do the statements and specific points in the statements represent good scientific thinking, and to what extent do they show violations of such thinking?

Objectives Dealing with Problem-solving Ability

The term "problem-solving" is used to avoid some of the emotional "attachment" or "detachment" often associated with the phrase "the use of the scientific method in attacking problems." But a more important reason is that the familiar steps involved in problem-solving constitute a description of scientific procedure. The importance of problem-solving as an objective stems directly from the definition of the purpose of general education, "to meet the needs of individuals. . . ." Problem-solving is assumed to be the major intellectual contribution of an educational program designed to help individuals meet their needs more adequately in the basic aspects of living and to stimulate them to participate more effectively in the affairs of the democratic society to which they belong.

Corey in chapter iii has indicated that the stage is set for learning when an individual has some clearly identified goal or is faced with some problem, obstacle, or difficulty. Problems stated spontaneously by students may serve as starting points for experience in problem-solving. Issues and dilemmas may be used to establish the conditions mentioned by Corey as being conducive to learning, but such motivation may also be engendered by direct instruction.

Problem-solving as a process, like scientific method, has often been defined in terms of a series of steps. Such steps or procedures are, however, assumed to vary from person to person and from situation to situation. For this reason the following desirable outcomes represent problem-solving processes in which students would normally engage, but not necessarily in any specified or required order.

Defining a Problem. Problems may be stated in many different ways. Such statements frequently contain several elements, each of which is a problem in itself. "Is it possible to control the atom bomb?" "Is there any defense for the atomic bomb?" "Am I too fat?" "Is Bonzo really good for a cold?" "What causes curly hair?" Such statements of problems often involve value judgments and contain words and terms too complex or ambiguous (multiple meaning) to be dealt with without further clarification. Students should be sensitive to

ambiguous terms in statements of problems, to the needs for analyzing a problem into subproblems and to recognize that the solution to a problem sometimes involves their own value assumptions on facts or factual relationships which may be identified by resolving a problem into its elements.

The statement of a problem in workable form usually requires some preliminary investigation. Therefore, students should know what sources of information are significant and what procedure to follow in locating sources of dependable information.

The following examples ⁴⁰ illustrate some of the kinds of activity and analysis associated with "defining a problem":

Consider the following questions: Is intelligence an inherited characteristic? Is intelligence related in any way with race?

Do the questions above contain any word, words, or phrases which are so ambiguous that a further clarification of the meaning is necessary in order to proceed with an investigation of the question? With any word you select, indicate what alternate meanings the term might have.

Consider the following question: What is the cause of the increase in height of the American male during the past fifty years?

Is this question stated specifically enough to allow an investigation of it? . . . If it isn't, state some of the problems in question form which, when taken together, clarify the meaning of the question.

Consider the following question: Assuming that human heredity can be predicted and led to an improved or more desirable type, should there be legislation restricting marriages to this end?

Granting the assumption, is this a question which can be answered by scientific evidence? If not, what kinds of considerations enter in?

Formulation of Hypotheses. The formulation of alternative hypotheses (including courses of action) and the selection of a most reasonable one is probably the most significant aspect of the problem-solving process. This process demands creativeness and⁴¹ it is often considered as the focus of the entire thinking process. One expression of its meaning is given by the following observation: Its [the course] emphasis is rather upon the initiation of inquiry, the finding of key difficulties, and the application of correct principles.⁴¹ The fertility with which students can formulate hypotheses is probably in direct proportion to their knowledge of the various principles or relationships pertaining

⁴⁰ *Ibid.*, pp. 3-4.

⁴¹ Walter F. Loehwing, A. C. Trowbridge, George Glockler, and G. W. Stewart, "Science in General Education at the University of Iowa," *Science in General Education* (Earl J. McGrath, Editor), *op. cit.*, pp. 149-69.

to the specific elements of the problem for which hypotheses are to be developed.

It is important that students in formulating the hypothesis show a recognition of the assumptions on which the hypothesis rests, identify the relationships or principles employed in formulating the hypothesis, check to see whether the hypothesis is consistent with the conditions specified in the problem, and study the implications or deductions of the hypothesis as a basis for judging its reasonableness.

In judging the validity of hypotheses students should recognize the kind of reasoning on which the hypothesis is based. Hypotheses, tentative conclusions, and contentions are sometimes based on deductive (if-then) reasoning, sometimes on almost direct inductive processes and sometimes on the indirect-argument type of reasoning. Often the validity of an hypothesis depends upon the meaning of critical terms or words used. Students should be able to recognize the kind of argument or reasoning employed in formulating hypotheses and to identify weaknesses in the argument used. The following example is an exercise illustrating indirect argument which might be employed in work dealing with genetics and heredity:⁴²

A legal controversy has developed concerning the male parent of a child. The mother's type of blood is AB. The alleged father's blood is Aa. The child in question has type aa blood. The following types of children could be produced by the above combination:

1. A child of type AA, in which case alleged father could be real father.
2. A child of type Aa, in which case alleged father could be real father.
3. A child of type AB, in which case alleged father could be real father.
4. A child of type BA, in which case alleged father could be real father.
5. A child of type aa, in which case alleged father could *not* be real father.

The conclusion that the scientist draws from this evidence is that the alleged father is not the real father. What kind of reasoning does this represent? What is the principal weakness in this kind of argument? Does this example have this weakness? Why would a person, like a judge, who did not have a rather thorough understanding of the principles of genetics and heredity, particularly as they apply to blood types, be less likely to have confidence in the conclusion that the alleged father is not the real father than the person who does have rather detailed knowledge concerning principles of genetics and heredity?

⁴² "Final Progress Report of Natural Science Committee, Co-operative Study of Evaluation in General Education," *op. cit.*, Appendix E, p. 7.

CONTEXT AND KINDS OF PROBLEMS IN WHICH STUDENTS
SHOULD DEMONSTRATE VALID INTERPRETATION AND
ASPECTS OF PROBLEM-SOLVING

In the preceding discussion certain kinds of outcomes were assumed to be desirable from the standpoint of science instruction in general education. Relatively little consideration has, however, been given to the nature of the context in which students should exhibit the desirable outcomes.

Present-day psychological studies indicate that the likelihood of sound thinking is greatest in connection with those problems in which the person has had practice. These findings lead directly to the implication that although students may recognize assumptions involved in operational, cause and effect, teleological, sampling, or extrapolation interpretations in a purely scientific context, they may fail to recognize such assumptions when dealing with interpretations of everyday problems or commonplace evidence.

The context in which students should be able to demonstrate competence with respect to scientific interpretation and problem-solving procedures is represented by problems which are significantly related to their present basic interests and such interests as they will likely be concerned with in the future. Such problems have been stated in different ways by different investigators. Typical problems encountered in meeting needs in the basic aspects of living were listed by the Committee on the Function of Science in General Education. Although this statement of needs and problems of living is made in terms of the upper years of secondary-school education, most of the generalizations apply to college students, as well. The reader is urged to examine the Committee's classification and analysis of the needs mentioned.⁴³ The list is as follows:

Personal living

- The need for personal health.
- The need for self-assurance.
- The need for a satisfying world picture and a workable philosophy of life.
- The need for a range of personal interests.
- The need for aesthetic satisfaction.

Immediate personal-social relationships

- The need for increasingly mature relationships in home and family life.

⁴³ Commission on Secondary School Curriculum, Progressive Education Association, *op. cit.*, pp. 24-32.

The need for successful and increasingly mature relationships with age mates of both sexes.

Social-civic relationships

The need for responsible participation in socially significant activities.

The need for social recognition.

Economic relationships

The need for emotional assurance of progress toward adult status.

The need for guidance in choosing an occupation and for vocational preparation.

The need for wise selection and use of goods and services.

The need for effective action in solving basic economic problems.

To indicate specific principles and concepts of science which students in general education should "master" seems to be unnecessary for two reasons. First, the most significant outcome of science in general education is to improve students' ability to interpret the phenomena and data of the field of science and to arrive at satisfactory solutions of their basic problems. This can be done with any selected principles or concepts which also contribute to "meeting needs in the basic aspects of living." The second reason is that students, with different backgrounds and in schools where different kinds of experiences are possible, will profit best from the selection of topics and principles most closely related to their experiences. It is assumed that a knowledge of scientific principles, facts, and concepts is prerequisite to the achieving of the objectives of general education but not an important outcome for its own sake. Thus, such background is essential in order that students may really understand the nature of operational thinking, cause-and-effect relationship, extrapolation and sampling, and relativity of theory and concept and is necessary for success in problem-solving. It is the adequate background of knowledge that gives the student confidence in the accuracy of his interpretations and the validity of his problem-solving procedures.

Selection of Contents or Topics and Organization of Courses

The selection of a major center or topic and its development in a science course should be made on the basis of two considerations; first, whether the topic makes a direct contribution to the development of the objectives of instruction; second, whether all the topics and their development contribute to all objectives. A topic on the nature of the solar system may serve a useful purpose in developing the ideas of postulates and assumptions of theory and concept as

well as make a contribution to the "need for a world picture." All or any part of a science course might be construed to make a contribution to the "need for a world picture." To justify a science course on this basis alone would, however, be invalid because of a lack of contribution to the other needs.

Different topics selected for instructional purposes have different possibilities for the practicing of scientific interpretations and problem-solving, including the application of scientific concepts, principles, and facts in problems of everyday living. One major topic, for example, the Carolina Bays situation used in the Colgate science course, may possess excellent possibilities for demonstrating how different scientific generalizations can be brought to bear on a problem and on the role of hypothesis in scientific thinking. For this purpose the Carolina Bays problem may be superior to another selection, say, for example, the origin of the earth, because in the latter case the detailed prerequisite, physical and mathematical understanding, may be a major obstacle. However, the extent to which the Carolina Bays problem as a major topic in a science course can be used to evolve situations pertaining to everyday living is another matter. It is not intended here to suggest that every topic or block of work in a science course for purposes of general education must make extensive application or contact with major problems of living. The answer to that question must come from an examination of the course as a whole.

Atomic energy as a major topic in a physical-science course for purposes of general education can very well take cognizance of "needs in the basic aspects of living." The development of the concepts of atomic energy can certainly reveal much regarding scientific theory and hypothesis thinking. It is also easy to see how other kinds of interpretation-and-analysis exercises pertaining to this topic can require observation and the consideration of definition, valid cause-and-effect thinking, or plan and order in nature. Its relation to the need for physical health can be indicated by reference to the role of radioactive isotopes in understanding body functions, or the diagnosis and treatment of disease. Opportunities may be provided in instruction for the student to develop more self-assurance by practice in formulating ideas, finding out what is wrong with them, discovering that he can defend his conclusions. (This is not unique to atomic energy as a topic, of course.) In meeting the need for a desirable world picture, there is opportunity for the development of the concept of probability (nuclear disintegration); and through extension of related principles, the student can become aware of the age of the earth

and how it has been determined. A contribution can be made to the need for a range of interests because of the extension of atomic energy and radio-active isotopes into such fields as medicine, agriculture, industry, and geology. Some aesthetic satisfaction may be engendered by the spectacular disclosures of following an invisible process with a Geiger counter and by seeing the high degree of symmetry in the whole atomic and isotopic structure.

The need for participation in socially significant activities, for social recognition, and for progress toward adult status may be taken into account by exploring the problem of who is to control atomic energy, including the atomic bomb and atomic patents, or the question of dangerous radiation. Students can have valuable experiences in the way of making surveys of public information and opinion concerning different phases of atomic energy and they can play the role of developing and/or finding materials useful for informing "non-school" groups. The many facets associated with atomic energy can bring students into contact with many fields of endeavor, if even a brief contact, and make a contribution to the need for guidance in choosing an occupation. The problems involved in the economics of developing atomic energy from the standpoint of government versus private support and the role of an organization like the Atomic Energy Commission can stimulate interest in the need for effective action in solving basic economic problems.

Objectives of Science Instruction in Relation to Those of Other Fields of Instruction

Science instructors when considering objectives and appropriate educational experiences like those indicated in the preceding paragraphs often make such comments as: "But this is not science — this is logic, this is psychology, or this is social science." One assumption in such a comment is that there are relatively few common objectives of instruction for purposes of general education to which the various so-called subject disciplines can make a contribution. Actually, various kinds of activities which would contribute to common objectives may be found often in professional writings in the various subject fields.

Modern learning theory indicates that a person is most likely to obtain a comprehensive understanding of such scientific procedures as proper cause-and-effect relationships or the formulation of hypotheses on the basis of principles and assumptions when such procedures are illustrated and practiced in a variety of fields — and

preferably when practice in several fields is provided concurrently. The implication of such learning theory is that when objectives of science instruction are common with objectives of social science and English instruction, co-operation should occur between these fields of instruction from the standpoint of clarifying principles and terminology. Each field of instruction profits from the examples of other fields, and the student profits from the improved opportunity for maximum achievement.

CHAPTER VIII

GENERAL EDUCATION FOR STUDENTS

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The preceding three chapters of this yearbook have dealt with the humanities, the social sciences, and the natural sciences in general education. By title and by general approach they center upon these three areas of subject matter and its organization for purposes referred to here as rationalist and neo-humanist in character. It is our intent, in the present chapter, to shift the angle of view and to focus directly on students not only as academic learners of organized and synthesized bodies of knowledge but also as people, as personalities whose emotional, social, and economic lives cannot be separated from their intellectual powers and activities. Our philosophical position is that of the instrumentalist, as described by Taylor (chap. ii), and of the gestaltist, as pictured by Corey (chap. iii).

Many of the discussions in this yearbook testify that the educators who plan programs of general education, whatever their differences, assume that the educational process can change, that is, can "improve" human behavior. With this assumption, we may have effectively come to the end of a long fruitless discussion about the value of "knowledge for its own sake." It may be that we now know that the man who, in other times, sought and achieved knowledge for its own sake was a more or less desirable human being. He was so to the degree that his store of knowledge enriched his associations with other people, or invigorated his pursuit of his life work, or gave value to other aspects of his life. In some cases it might have contributed to the world's wisdom. It is likely that, in a period less consciously concerned about

social usefulness than ours, such a judgment would have been made.

There is general agreement that education as a process of improving human behavior should help students develop as individual and social beings. There are, however, certain important differences among educators as to how this may be brought about. Taylor (chap. ii) has considered the assumptions underlying three of the principal ways in which men, thinking out methods of planning general education, have approached the problem. Two of these three schools of thought, the rationalist and the neo-humanist, while differing in certain important respects, agree that the most vital consideration is the content or subject matter of education.

WHAT SHOULD STUDENTS STUDY?

According to this joint view of the two philosophies, if educators set up for their students programs which select the knowledge to be acquired, organize this knowledge in appropriate ways, and train the students according to the well-designed procedures implied in organization, the education of young people will have achieved all we can expect of it.

Interest in what students should study has always been a matter of great importance to educators, and it must continue to be, whatever educational philosophy lies behind their planning. However, college teachers, buried in their subjects and convinced of the values of what is taught, have been notoriously disinclined to discuss their teaching. They seldom questioned the usefulness of what they were doing, and, for the most of our history, there was little occasion for them to do so. Then, quite suddenly, college education in this country became a very large enterprise, and within a few college generations the entire character of our colleges and universities changed. This process has accelerated greatly in the last ten years. Colleges that had always been small — which, in their organization, their educational planning, their physical structure, perhaps should have remained small — became big colleges; universities grew to be the size of cities.

This pressure of new thousands of students to be educated is part of a social revolution whose nature we do not yet know more than dimly and in fragments. The medieval university, the eighteenth-century university, even the provincial universities in England, and the state universities in this country in the early years of their existence had at least a fairly clear and stable image of the world into which their students would move from their university days. We no longer have that image, not only because our students are so many and so

diverse but because we have so few convictions about the kind of future our students will have in this present violently turbulent world.

The first response to these problems by many colleges, and especially some of the big universities, was to try to find more and different subjects for students to study. The content of college education altered, during this period of expansion, largely by haphazard accretion and, in most instances, with little serious thought about what college education should do for students. Technical courses, training in manual skills, preparation for many business and semiprofessional jobs, became, in many places, part of the curriculum. These are, frequently, perfectly legitimate activities, useful to students and society. There is growing evidence that many or most of the concepts and skills taught in such curriculums for other purposes than narrow vocational training may contribute richly to the general education of many students. But they have often been undertaken without any question as to whether such teaching was the job of colleges, instead of some new form of institution, and without any inquiry as to the responsibility of the colleges for the total education of their students.

THE QUEST FOR UNIFORMITY

Partly as a protest against the seeming chaos in education and partly out of serious educational convictions have come many of the various programs of general education. The most influential of these efforts have been described by Taylor. The solutions developed through synthesis and organization of subject matter by rationalist and neo-humanist alike have the support of authority and simplicity, both virtues that appeal greatly to harassed college presidents and faculties. Confronted not only with academic problems but also with the suspicion that there is something potentially dangerous in the diversities confronting us, educators have sought some means of achieving the uniformity and homogeneity they no longer find in the character of their student populations, in the purposes for which students come to college, or in the world to which they return. These programs give uncertain administrators the security of a respectable intellectual tradition. This security, however illusory it may be, as this volume has already pointed out, makes it seemingly unnecessary for educators "to take risks or to leave the certainties of the past."

Their fear of taking risks, their dependence upon the past, is obvious in faculty conferences on the development of programs of general education, whether these be in individual colleges, in local group meetings of college people, or in national conferences. Recently, repre-

sentatives of twelve institutions gathered to discuss and plan a program of general education, spent the entire day on "how to teach the third book of Vergil's *Aeneid* as the core of the humanities."

It is clear from the organization of many programs of general education that administrators and teachers in general take refuge in the protection of their subject matter. They feel relatively secure in attempting to bring about synthesis, unity, integration, and liberal intellectual values by keeping their attention unswervingly on the organized materials of instruction. The results are found in the common division of the whole field into four or five parts: (1) the physical sciences; (2) the biological sciences; (3) the social sciences; (4) the humanities; and, frequently, (5) communications — the skills of reading, writing, speaking, and, more recently, listening. They are found, too, in the techniques of course organization, the survey, overview, or integrated course in which, after selection from among the thousands of facts, names, dates, concepts, ideas, and problems, those chosen are subjected to academic heat, moisture, and pressure to bring about concentration, condensation, and synthesis. Much of the commentary in this yearbook reflects this trend toward retreat into the safety of academic tradition.

Psychologically and emotionally, withdrawal into the "solid substances of organized fact and precedent" helps to ease the uncertainty, anxiety, confusion, and feelings of inferiority that assail many teachers when they attempt to face directly the realities, tensions, and complexities of their students and the modern world of which they are a part. Rationalist and neo-humanist, alike, express their protective reactions with such semantic symbolizations as "cultivation of the intellect," "separation of the mind and body," "intellectual discipline," "transmission of the culture" (without inquiry as to what is worth transmitting, what is inconsequential and irrelevant, and what may be actually harmful), "avoidance of superficiality," the development of "critical thinking," and that last bastion of defense, "the maintenance of academic standards."

THE NEED TO RECOGNIZE DIVERSITY

The third approach to learning described by Taylor, that of the instrumentalist, rejects the view that educators should decide, without reference to the students to be educated, that a particular body of knowledge is most important for all students, that intellectual discipline or any other single way of learning is the only appropriate way for all people all the time, or that any single prescribed order of

studies will serve all needs. This view assumes that the nature of a particular group of students, the qualities of the individuals, and the need of society for individuals trained for common understanding and enlightened behavior must be considered when plans are made for their education.

It is the purpose of this chapter to say something about the aims of education implied in this instrumentalist approach and how these aims may be pursued. For this purpose, as for Corey's purpose in his analysis of the psychological foundations of general education (chap. iii), the distinction between the first two and the third modes described by Taylor is most important. The rationalists and the neo-humanists examine their own knowledge and their intellectual processes and decide how this knowledge and these modes of thought shall be transmitted to their students; the instrumentalist seeks to understand as much as he can about the students in his charge and to consider subject matter, ways of learning, and the order in which learning takes place in terms of what he knows about them.

Who are the students in our colleges? Particularly in the expanding junior or community colleges, certainly in the big public universities, and even in the private colleges, they come from all economic and social classes, from all ethnic and national backgrounds. There is enormous variation among them in scholastic intelligence, in social attitude, in creativity and energy, in emotional depth and stability. Whatever doubts a particular individual may have about the wisdom of it, very few people would reject, publicly at least, the common conviction in this country that college education should be available to a great many different kinds of young people. In fact, the President's Commission on Higher Education has recommended that a thirteenth and fourteenth year be available to all Americans, as the high school is now. Our colleges and universities, like those of England and the Continent, were originally intended to educate a socially and intellectually homogeneous group of young men for the law, the church, the universities, or for lives of cultivated leisure. It was not difficult to find an educational design suited to such a group of young men and to their goals. But we have gone beyond that view of education in this country. There would now be little tolerance in most quarters of any suggestion that higher education should be reserved for an intellectual elite, who should be chosen on the basis only of performance in academic subjects or high scores on tests of verbal and abstract intelligence, and who should then be educated as leaders. Instead, we have been led to conclude from searching studies of the

nature of democratic leadership that it is of many kinds: intellectual, physical, mechanical, social, artistic, practical, political, ethical. We assume that none of these are necessarily related to a high degree. We know from many observations that most of us, even those of greatest brilliance in academic subjects, are followers of other sorts of leaders in most of what we have to do. Moreover, it is clear that no leader can lead unless he has followers with some training in following and that the better these are trained the more certain and effective is his leadership. Therefore, general education should identify and deal with many kinds of intelligences and with the whole range of each kind, purposing to increase understanding, sharpen awareness, release creative energies as far as we may in the interest of increasing the personal satisfactions and life efficiency of young people and their growth in social usefulness.

Indeed, education in this country is moving toward an even greater increase in the numbers of young people in our community colleges, four-year colleges, and universities, and with the increase in number will continue to come the increase in diversity. If we suspect that no one kind of program will be appropriate for all students in our colleges now, certainly no one kind will be appropriate for those whom we will have in the future. Obviously these students will seek many different life goals and will reach them in many different ways. Their education must help them discover their best abilities and formulate the values by which they will plan their lives.

Havighurst (chap. iv) points out that there is some difference of opinion among educators as to how far this expansion can legitimately go. Certainly an inflexible, rationalistic educational program, if it gains enough currency throughout the country to shape the character of our colleges, will fail to meet the needs of many students and of our society. It certainly would ultimately reduce and change the character of the student population. To a less extent universal application of the neo-humanist philosophy and its ensuing structured patterns would restrict enrolments and deny any sort of college education to the majority.

For all their differences, all plans of general education agree that its basic purpose is to help people live as wisely, usefully, and happily as they can live in their relations with themselves, other people, and their environment generally. Almost all such programs as are rooted in rationalism or neo-humanism and a few of the instrumentalist programs—however much they have broken down the old forms and have organized knowledge into new combinations and structuring—

are designed on the assumption that there are *some* bodies of knowledge that all students must acquire as well as particular kinds of disciplines they must all experience. It is this interest in subject matter as it is to be selected, organized, and administered to students that determines the character of most of general-education programs. It is by this means that men and women who plan such programs believe students will learn to live most wisely, usefully, and happily.

RECOGNITION OF DIVERSITY IN PLANNING

A quite different conception of general education, based on instrumentalism — one which has not been formulated as often or analyzed as much in the literature of general education — rejects the idea that all students should follow the same course of study. It holds that the sequence of studies that is appropriate for some students might be entirely inappropriate for others. It rejects the idea of intellectual disciplines as the *only* approach to learning. This view of general education is developed on the assumption that the emotional and psychological life of young people, the social and cultural attitudes they bring to their studies, their particular talents and abilities, their relations to other human beings — all these, as well as their intellectual ability to meet the demands of their teachers, are basic considerations in planning a program of general education. Instrumentalism assumes, in fact, on the basis of much educational and psychological research that the ability of students to function intellectually is greatly affected by their attitudes, their emotional drives, and the particular character of their talents. Moreover, it rigorously rejects the idea that the intellectual life can be severed from these considerations. Finally, it proceeds on the assumption that we can help students live wisely, usefully, and happily by identifying, supporting, and using their own drives and expectations, their talents and emotional concerns, their feelings about themselves, about other people, and about life, all in the service of their education.¹

¹ Educational experiments directed toward this approach to general education have been made, and are continuing, at such institutions as Antioch, Sarah Lawrence College, Bennington, Stephens, the General College of the University of Minnesota, the Basic College at Michigan State, other experimental institutions, the junior or community colleges, particularly of California, and several State Colleges such as San Francisco and Chico. In these, investigations and experiment, revision and re-evaluation, formal and informal, goes on continuously. The California Association of Junior Colleges is now carrying on a state-wide study of general education under the sponsorship of the American Council on Education, supported in part by a grant from the Carnegie Foundation for the Advancement of Teaching.

MAKING USE OF STUDENTS' MOTIVATION

A great deal has been said and written by way of deploring the attention of such instrumentalist educators to students' "interests" as a way of planning their education. Hutchins drew one of his many red herrings when he described this process as "brooding in public." Obviously, from Corey's basic review, this method is neither brooding nor public. Mark Van Doren, as a poet, knows that the inner impulse to experience and to learn is something that a poet trusts. But when he turns from being poet to being educator, he believes that young people are not wise enough to know what is best for them and that they must be old before they are wise enough to have any judgment about what they should learn. Many people who are suspicious of the young, who assume that youth will seek virtue only when we tell them where virtue lies and make them follow our direction, believe that they will seek the easy way out, will choose to spend their time in frivolity, unless we compel them to be industrious. Modern psychology shows that these things are not true about the young. Any college teacher who has taken the pains to inquire knows that college Freshmen have a vast fund of energy to spend on learning and great expectations when they come to us. One of the saddest and most wasteful things about college education in America is the number of students for whom the first year is an anti-climax because we, their teachers, fail to pay attention to the questions they are ready and eager to ask us. We are too busy with our prefabricated plans and our own answers to the questions we think they ought to ask.

Corey has considered at length certain of the psychological factors that affect what students learn and how they learn: "People learn in order to reach goals or achieve values that are of personal worth to them" (chap. iii, p. 53). He points out that, even in programs whose operators show no interest whatever in students' motivations in learning, elaborate efforts are made to create motivations, although these often bear no relation to the things learned. "This ingenuity has resulted in . . . graduation requirements, course prerequisites, honors convocations, dean's lists, honorary fraternities, probation practices . . ." (chap. iii, p. 54) and so on. Such dubious incentives are the more necessary when no effort is made to discover valid, serious, and deep-rooted motivations which are, indeed, the most important incentives of all.

We should not need to set up these false and fragile motivations.

Freshmen coming to college are in a wonderfully receptive state — and a very vulnerable one. Most of them are away from the authority of school principal or parent for the first time. They have their first opportunity to assert independence, to take a stand as an adult. They are about seventeen years old and in the latter stages of their adolescence. They are dominated by feelings of adventure, of rebellion, of fear, of anxiety, of expectation. The enthusiasm and energy which they are able to pour into activities which challenge their imagination can and should be harnessed in the interest of learning. In the opinion of the instrumentalist, therefore, the first thing a program of general education should do is to consider ways of using the common interests and drives characteristic of late adolescents in planning their education. When rationalist and neo-humanist demand that the students read the books required by the teacher's carefully planned syllabus, the energy which might have been captured for learning is being driven away from study in many other directions. It is seldom possible to force these young people to be what we think they should be — let us discover, rather, what they are and what they need and want. All of them are interested in their own identity. They ask, "Who am I? What kind of person am I?" Again, they are concerned with the continuing conflict between freedom and dependence because the desire for independence and the fear of it is, in some measure, in all of them. They are anxious to discover their own strengths, and most are willing to face the fact of their weaknesses. They are able, for the first time, to think intensely and decisively of possible directions for their lives. We should, therefore, at this point be ready to help them test the validity of their interests and to discover new interests. Their vision is not limited to self, but they are anxious for help in thinking about the confusions of the world they live in and what they can do to clean them up. It does not help them intellectually or educationally to tell them to wait until next semester or their Junior or Senior year until they have learned, through required courses and sequences, a great many other things and that, only then, will we let them consider these problems. It is all very well for us to say we know what is best for them, but we can only lose a large share of their energy if we try to force them to believe this because we say so. There are certainly students for whom any particular course of study we might plan would be appropriate and who would welcome the opportunity to follow it, not because we tell them to, but because they are able and willing freely to invest their energies in it. This does

not mean that all students should be expected to feel as these students do or that only those students should be educated who can accept such a program as significant for them.

INTELLECTUAL AND PERSONALITY GROWTH: INSEPARABLE AIMS OF GENERAL EDUCATION

Havighurst has listed "five basic aims" of general education with which he believes all educators would agree: (1) to develop critical intelligence; (2) to develop and improve moral character; (3) to develop and improve citizenship; (4) to create intellectual unity; and (5) to equalize opportunity for economic and social improvement (chap. iv, p. 73). These basic aims would by no means satisfy an educator who believes that the acquisition of knowledge is small satisfaction for the man who cannot live in understanding with himself and his fellows.

Again, Hutchins, ignoring everything we have learned from modern psychological research by making a sharp separation between education and experience, has declared that, "In general education . . . we may wisely leave experience to life and set about our job of intellectual training."² Young people spending the crucial years from seventeen to twenty-one in college will make no such separation even if we try to force them to. Their education should be a part of their daily experience. Modern students do not live in a cloister, and, if we take Hutchins' advice, we will only encourage what already happens too much and too often — their effective education will take place outside their intellectual life and their academic learning will, indeed, be unrelated to their total experience.

If we are to counteract this false schism, we should help students learn about interpersonal relations. We must aid them to develop understanding of other people's motives as well as their own and to increase their capacity to accept and understand people unlike themselves. There are many ways for students to learn this. For some students one way is to study the dynamics of behavior, as behavior can be understood through developmental psychology. An anthropologist who thinks about the way his students might apply knowledge of other cultures can use his materials even on an elementary level to help them understand the relation of men to each other and to society. A psychologist can bring the study of the biological evidence of emo-

² Robert M. Hutchins, *The Higher Learning in America*, p. 69. New Haven, Connecticut: Yale University Press, 1936.

tional states from the growing field of psychosomatics to bear effectively. A sociologist guiding studies of community organization or work in the college nursery school can stimulate students to further desired and desirable personal and social awareness.

In violation of these established facts, most plans of general education, particularly those based on rationalism and neo-humanism as indicated earlier, set up a program for all students to study in a given order. One of the principal convictions of educators who accept the instrumentalist's position is that students' needs, students' intellectual and psychological readiness to study something, should principally determine the order of their education. Some of these matters take care of themselves—you cannot study Goethe, except in translations, until you have learned how to read German, or physics unless you know some mathematics. But it is very doubtful wisdom to require all students to study science in their first year of college, or philosophy, or Greek literature, or history. And one of the greatest incentives to study, to extend a student's range of experience, comes from his having an opportunity at the very beginning of his college life to study something he wants to know. This does not mean that the college must follow a student's whims. It does mean that teachers and counselors can identify and use the drives a student has for the things he wants to learn to direct him beyond these immediate desires. The student who wants to read Eliot or Rilke thus finds his way back to the metaphysical poets and the Greeks. For another, the study of natural science or literature raises questions that must be pursued by intensive study of philosophy. It is very common experience in the experimental colleges for a student in such a situation to seek, after a year of rejection, the very study he had been unable to accept.

SOME REQUIREMENTS FOR ADEQUATE PLANNING

Understanding of Students through Good Counseling. Such an approach to education needs very careful planning; and planning means a system of counseling and guidance that goes far beyond that now available to most college students. Such counseling must be united in basic ways with the function of teaching. A teacher needs to know his students for the purpose of making his teaching as significant as possible for them. Therefore, he must have an active two-way relationship with the counselor or must, as part of his own function as teacher, serve as counselor himself. More and more this functional attitude toward education indicates that teaching and counseling are in-

evitably interrelated and must be made more perfectly so. At Sarah Lawrence College, as at Stephens, all faculty members act as counselors, and in seeking new faculty members, these colleges look for people who are interested in the whole-life experiences of their students and who are, therefore, willing and able to act as counselors within the limits of their capacity and training. In counseling, educators must make use of all the insight they can get from psychology, psychotherapy, projective personality tests, and other diagnostic methods as well as from research into the relation of emotion to both biological and intellectual functioning. These methods must be used, along with the usual practices of teaching, for the study of students. Such psychological methods must be supplemented by acquisition of sociological knowledge of their home background, their socioeconomic status, and their life on and off the campus aside from their classes. It is necessary to know what myths, fantasies, illusions, and misinformation students have been fed in order to know, in the process of their education, what *unlearning* has to take place. Students are very much concerned with problems of moral value, and these take the form of philosophical questions, of concern about their private behavior, of discussion about their social or economic ideas. Neither the study of history nor the authority of the teacher can answer these questions for them, but teachers and counselors must be prepared to give students help in working at these problems. They are among the most important concerns of young people, and, if we fail to use student interests in dealing with their vital problems, we lose a very important opportunity for educating them.

Understanding of Social Dynamics. In the process of building a general-education program based on developmental principles, intensive and continuous study of the social, economic, and political dynamics and of the organization and processes of local, national, and world society is essential in addition to the study of students. The aim usually stated for this function is *good citizenship*, an abstraction, as Naftalin points out (chap. vi, pp. 121 ff.), that is ill-defined at present and widely and vaguely misunderstood even though it is much talked about. Instrumentalists refuse to assume that the student successful in the mastery of academic subject matter always emerges as a good citizen, however defined. They ask not only what are the fundamental elements of good citizenship in the democracies but what are the special contributions to community and wider social action that can be made by men and women of many different kinds and degrees of interest, talent, and ability? It is impossible, moreover, to accept the view that general education, in its social, political, and economic as-

pects is designed solely for the improvement of the state, important as that objective is. There is, in addition, a powerful element of "enlightened" self-interest in getting one's self trained to become a "good" citizen and in gaining all possible insights into every aspect of what one can do, feel, and think to improve the life of his neighborhood or the larger world. For in healthy, vigorous, and rationally run communities, big or small, lies the first and highest hope of security and preservation of whatever individuals value most — health, a satisfactory job, a happy family, freedom to worship in whatever way suits, opportunity for social mobility, for political decision according to their lights, a chance to travel, to read and think as they will, and to relax in many kinds of recreation. This appeal to what may be considered selfish interest in community matters is sometimes the strongest motivating force to stimulate students possessed of variant kinds of special interests, to attack vigorously pertinent social studies. Hence, as Havighurst clearly indicates in chapter iv, there is a tendency in the experimental institutions to make the local community surrounding the college the starting point and the laboratory of education for citizenship.

This is one of the points of sharp conflict among the classical or rationalistic educators and those with a developmental or instrumental approach. Hutchins as rationalist has vigorously attacked the "cult of presentism," and W. H. Cowley as neo-humanist has been worried about the cultivation of the "merely local" as opposed to the "universal" man. This controversy is just a modern version of the battle of books, which has been going for hundreds of years. Roger Ascham and the other schoolmen of the Renaissance looked on knowledge as ancient or modern in trying to determine the direction learning should take in an expanding world; Montaigne was "not greatly affected to new books," because ancient writings had more meat in them for the training of the intellectual; and when Swift sent his Ancients and Moderns to battle for point of vantage on Parnassus he knew his public — he was concerned with the education of an English gentleman. The modern version of this controversy does not enlighten us. Certainly our educational aims are not the same as the purposes of the Renaissance or the eighteenth century because we are educating an entirely different public. For some purposes it is essential to study the past, and no education is worth its salt that fails to use all the resources of history when the study of the past is relevant to the present and future purposes of education. This choice between past and present, between classical and modern, between the analysis of the thought and wisdom of the past and the experience and insight

into the present does not have to be made. But for the purposes of helping students understand experience, which is one of the objects of contemporary education, it is important to use experience as an educational tool. Students learn to understand the relation of the individual to his environment, the way people grow by working and playing with other people, by voluntary service and observation with children in a nursery school and other similar activities. It is important, if students are to understand the way a union member with one set of interests and a representative of management with another set of interests settle their differences, that they follow through the process of an arbitration hearing — and that means actually sitting through the hearing, instead of reading about it. An understanding of the operation of our economic system, of the political and social forces that affect it, is important not merely because we live under this system but because understanding it will give us data we must have for developing a social philosophy — data which we will never get by starting with the Republic of Plato and moving slowly down to within shouting distance of our own time by means of devouring a shelf of the classics. Plato's *Republic* might be very important for this same purpose — but the decisions as to what should be read and what should be skipped must be made not on the basis of either chronology or authority, but on that of the needs and interests of students and their society. Moreover, the organized and changing life of human societies is a seamless web, and students may understand it best by taking hold of it at the point of most familiarity and moving from there into other parts of the present, the past, and the projected future. Much of what Corey has to say about learning and motivation and Havighurst's analysis of the functions of general education in relation to society give support to this kind of beginning.

Continuing Examination of Subject Matter. In planning for students it is important to scrutinize all the academic conventions. Many programs of general education give lip-service to the importance of aesthetic experience and to the importance of the arts in our civilization. What this interest in art means, usually, is an interest in reading and talking about art. Few students in our colleges are given any opportunity for firsthand experiences with either the visual arts or the performing arts as part of their education. Most colleges look with respect on "theoretical" studies — history of art, aesthetics, "appreciation" in terms of looking, listening to, and hearing and reading about creative works and such peripheral matters — because these have an academic character. But the majority of teachers look only

with condescension, at best, on "practical" or "applied" studies. Music composition, sculpture, and painting are branded as applied arts and not held to be academically respectable. In most places the practice of these arts is looked on as important for professional reasons for a very few students who might be better taught in off-campus schools or institutes and for others merely as interesting means of self-expression and an appropriate pastime for leisure hours — but is not regarded as a part of a serious education.

To the instrumentalist, the study of painting, sculpture, or music is important for students' education in many ways. Rationalists and neo-humanists talk comfortably about the discipline of mathematics. But instrumentalists find that there are some students who can quite agreeably go through a course in mathematics and experience none of the expected effects of this discipline, yet for whom work in the painting studio or long hours of practice on piano or violin can provide a rigorous and lasting discipline. "A student of art must be taught to find the rules for each individual work as he discovers them during the process of his own creative effort." Painting and other applied arts offer other ways of organizing perceptions and dealing with reality in a world in which we have come to feel that the only way of saying anything is by using words. Artists recognize the creative intensity children bring to painting — an energy which gets lost in their adolescence under the pressure to abstract, to conceptualize, and to interpret the world they see in words. "The most important characteristics of children who present themselves to the teacher of art are their energy, their wondering, and their desire to impose themselves upon reality and to make it take heed to them."

Another, and in some ways the most important contribution of the study of art to education, is the discipline it gives students in learning how to see and to observe. Most people see objects and events dimly, partially, and inaccurately. Those, however, who develop capacity for sharp, accurate, and comprehensive observation in the studio carry these abilities into the world outside. Thomas Henry Huxley, in his capacity as inspector of schools, recognized this. He recommended that all students be taught drawing and painting, not to make more and greater artists for England, but to sharpen the powers of observation of all boys and girls. A program of general education misses many possibilities for many students when it fails to give students opportunity for this creative experience. Work in the studios and shops should not be limited to those especially able and with concentrated interest — it is important for students who may be

bookish, facile in the use of language and in the kind of thinking that is expressed in language, but who have need to balance their abstraction and verbalization with the understanding of visual and auditory forms and with the "feel" of tools, and materials, and instruments. The study of arts in general education is not to create artists — it is a way of helping young people to see, hear, and feel the visible world.

Upon these foundations, then — the general definition and re-definition of goals, the study of students and of society to determine the needs of both, and the re-evaluation of subject-matter with these purposes in mind — the teacher builds his plan for general education and the curriculum to which it leads. Everything that happens in the college, if its character is to be consistent with the purposes here outlined, must be part of this process. The subjects studied and the way they are studied appear in striking contrast to the curriculum developed by the classicist or the neo-humanist, and the teaching methods will be sharply different.

TEACHING METHODS SHOULD BE DETERMINED BY TEACHING AIMS

If an educational program is built on the assumption that the aim of education is to cultivate the rational faculty and to transmit to students the ideas and the written record of the Western tradition, the selection of material for them to study is relatively easy. This can be done within any one of a number of frames — the Great Books, basic courses in science, social science, and the humanities. And the ways of teaching will also readily shape into a pattern: If there is a common body of knowledge which all students must acquire, the syllabus, common reading assignments, and lectures naturally follow. If the role of the teacher is to impart knowledge, or train the mind, and stop there, most of the relations between student and teacher other than those of learning alone, are a matter of indifference.

But the things young people study and the way the college is conducted will be quite different, if we take account of the present life situation of our students; if we recognize that students learn in different ways, that the aim of education is to help students make the most of their particular abilities, to channel and extend their drives, to use their present convictions and hopes and interests as a means to making them better human beings and better citizens, and — if they are to become doctors, or social workers, or teachers, or secretaries, or business men — to help them bring as deep an understanding as possible of themselves and of their world to the work they do.

This attitude toward students makes it important that there should

be good personal relations between teachers and students if education is to take place. The kind of universal "microphone education" common in so many places will not do. While a carefully planned use of lectures by knowledgeable and inspiring teachers may be excellent as a starting point, there must be following and continuous discussion and exchange of opinion, ideas, and knowledge among students and between students and teachers. Moreover, some opportunity must be found for students to have access to their teachers.

The administrators and faculty for whom education means general personal and intellectual growth will organize their college in such a way that all the resources of the institution will be available for study of the problems to be discussed. The students will there learn early that knowledge does not exist in departments but is put there by curriculum-makers, often to assure teachers of a private preserve. Students need to draw on the resources of anthropology, sociology, psychology, and biology often together and at the same time for explanation of some of the aspects of human behavior, and the curriculum should be structured to make this possible. Just so, also, the study of literature, philosophy, and history together will illuminate the discussion of an economic problem. This kind of education cannot take place unless there is high morale in the faculty; unless they basically believe in the educational objectives outlined here. No amount of reorganizing of subject matter will alone establish the active, co-operative, mutually stimulating relation among faculty members or between the faculty and the students that is essential for the kind of development sought here.

LIFE IN THE COLLEGE AS AN EDUCATIONAL FORCE

The students must know that education is not something that happens to them through the activities of other people alone. They must take part in their own education not only by learning what other people tell them to learn but also by independent search for answers to their questions. All the resources of the library of a college should be open to them.³ Books should be easily available, not hidden in stacks, and librarians should be guides and educators, not custodians of treasures to be hoarded. A syllabus should be a signpost, not a cell for confinement.

The life of the college community should be a part of the students' education, as Williamson points out in this yearbook (chap. xi). Edu-

³ See B. L. Johnson, E. Lindstrom and Others, "The Librarian in General Education." New York: American Library Association, 1948.

cation for democratic living demands democratic living. Students must help to plan the curriculum of any program that pretends to be interested in their needs. If that is made possible, they will become increasingly responsible and will seriously examine their education and seriously think about their goals and the direction of their lives. If they are encouraged to become part of the planning, they will meet and talk with each other about educational problems; they will find out what questions recur in the minds of many students and will discuss the way the curriculum considers, or might consider, these questions. Students should have the widest possible opportunity to administer student government as part of their education and should have a large amount of social freedom, not as an evidence of "emancipation," but because it is inconsistent to say that education reaches into the personal, emotional, and social life of students as well as into their intellectual life and shapes not only the substance of their knowledge but also their attitudes and their actions and then fail to give them the opportunity and the help we can give in the way they live as members of the college.

HOW WELL DOES GENERAL EDUCATION SUCCEED?

Finally, the *instrumentalist* view, which expects educators and students alike to look upon education as a changing experience, involves a continuing definition of the purposes and goals of an educational program and an evaluation of its results. The staff of the General College at Minnesota spent five years of thought and discussion on the formulation of a statement of purposes and functions,⁴ and the process of revision of these goals goes on in the twentieth year of that college. Consideration of ends and means requires the setting up of the best devices for evaluating results that present knowledge and techniques will permit. It is not enough that the student read a book, pass an "objective" examination set to test his knowledge of it, and get a grade. We must find out what we get, what he gets, and what society gets for what we do.

We cannot be satisfied with the accumulated records of student grades in courses or the impressions of instructors as to whether our students are making a poor, mediocre, or good achievement in the work we think they *should* take. Since our concern is with the changes occurring in all aspects of a student's personality — his health, his emotions, his value attachments, his interests, his drives, his social

⁴Ivol Spafford and Others, *Building a Curriculum in General Education*. Minneapolis: University of Minnesota Press, 1943.

competence, his symbol systems, his aesthetics, his ethics — we seek some indication, some measure of his growth, all along each of these lines as well as all together. To be sure this involves us, as Eckert points out (chap. xii), in a vast complex of measurements and evaluations for which we are as yet ill-prepared. Many of our instruments are still primitive, low in validity and reliability. Others are still on the drawing boards. Much must still depend upon subjective judgment. We have as yet few satisfactory means of observing and recording shifts in behavior. Nevertheless, to the experimentalist these limitations constitute a challenge rather than a discouragement. We must, therefore, make all possible use of student judgment of the organization, management, and effectiveness of our general-education process. We must combine this with the judgment of teachers. We must sometimes add to it the gossip of the campus, of friends and critics of the institution, of parents of students, and of alumni. We must make such use as we may of a variety of standardized and experimental tests by the pre- and post-administration technique. While we carry on the giving, scoring, and analysis of subject-matter, culture, psychological, and academic intelligence tests, we must explore the possibilities of measuring changes in students with some of the newer devices such as the projective tests, personality studies, sociometric tools, group dynamics, attitude scales, semantic analyses, scales of values, and such intricate instruments as the Minnesota Multiphasic. Since most of these measure small changes over a short span of time, when they measure anything in which we can have confidence at all, we work and plan for follow-up studies as our students leave the campus, get jobs, marry, become good, bad, or indifferent citizens, fulfil the hopes we have of them, or sink into ineffectiveness. In all of this attempt at evaluation, students must share, as they must share, in the planning. And finally, all results, whatever they may be, must be drawn together, organized, synthesized. Sometimes this is done by the counseling staff, sometimes by specially employed evaluators, sometimes by the teaching staff and administration, and sometimes by all together. If this be "scientism, presentism, or anti-intellectualism," we can still greatly profit by it.

Against this general background of the views and activities of the instrumentalists, it is essential to examine in some more detail Havighurst's comments (chap. iv) as they appear from this view. There can be little dispute with his summary of the action of social forces upon education in America's history, its vertical and horizontal expansion, its steady increase in enrolments, its attempts to meet so-

ciety's demands for an ever greater social, economic, and political literacy and its reinforcement of the social and economic mobility. There seems little question as to the validity of his analysis of the first two characteristics of this expansion, the general control by the various states and the approval of the vast majority of the people, as witnessed by their general willingness to support extended schooling, vocational, general, and liberal, from nursery school through the highest reaches of professional training and the broadest ranges of adult education. In describing his third characteristic, however, there appears to be some ambivalence and some inconsistency. The "older notion of an educated elite which would carry the major civic and cultural burdens of society" (p. 73) does not seem to us to have been "superseded." In fact, Taylor's assertion of education's "refusal to take risks" or "to leave the certainties of the past" (chap. ii, p. 25) would appear to contradict this statement if viewed from the philosophy of rationalism and to some extent of neo-humanism. The trouble with these educational philosophies, especially the rationalist, is precisely that they propose *not* to eliminate domination of society by the educated elite. In them, indeed, we seem to have little more than a substitution of an intellectual hierarchy capped by an aristocracy of scholastic brains, substituting for the older hierarchies and aristocracies of blood, or of political or economic power. True, the base has been broadened with expanding education, and various devices have been developed for identifying and supporting through school and college the more able students of abstract, academic, verbal, and scholastic competence and those most adequate in mastery of rationalistic or neo-humanistic curriculums.

Part of the problem of who should be admitted to general-education programs at the college level and, correlatively, who can profit by them may be somewhat resolved by closer analysis of Havighurst's statement. He says that, "there is a tacit agreement that not more than half of the population is intellectually capable of profiting from *formal* (*italics ours*), full-time general education beyond the age of eighteen" (p. 73). By this he obviously means both the junior or community college and the four-year college or university with an enrolment from the age group of eighteen to twenty-one or twenty-two years and with either an organized program exclusively of general education or one partially combined with vocational, semiprofessional, or professional training. He says, further, that he would by no means deny to that half of the population "not intellectually capable" such training in general education as they may later care to acquire through presumably informal adult education. The realities and dynamics of the situation

as it exists in the large midwest universities and the big municipal junior colleges, especially those of California, would lead us to suggest modification of Havighurst's position on this point. In the first place, the students in these institutions are by no means limited to the eighteen-to-twenty-one-year-olds. In fact, in one large California junior college the median age of full-time students is twenty-seven years, and this continues even after the wave of older veterans has passed. Moreover, the current California study reveals a strongly motivated demand, especially among the older students, for functional general education oriented to instrumentalism. This is particularly noticeable in such areas as the psychology of personal development, marriage and family life, vocational orientation, the creative arts and crafts, and the work in citizenship, such as applied sociology and the study of local, state, national, and world politics. Further, in many of the junior colleges the borderline between undergraduate and adult education is by no means sharp or clear, and the word "formal" would have little meaning.

Two additional qualifications, essential from the instrumentalist position, may be suggested. The first is our assumption that experimentation with organization and methods in general education has not yet gone far enough to warrant even a "tacit agreement" that half of the population is unable to profit by any formal program beyond eighteen. This notion strikes the experimentalist as being at least mildly defeatist. We take the view, instead, that, with another half century or so of research, planning, cutting, and trying, we may learn how to give profitable general education to ever greater numbers of students with wider ranges of abilities, needs, and interests and of various ages and levels of maturity. We may learn also how to motivate such students more effectively. The patterns of procedure are indicated in Corey's chapter (chap. iii). We cannot accept the pure rationalist position which would seem to condemn the "lower" half of the population to be "followers" of the "upper" half in all aspects of living, personal and social, with which general education is concerned and thus to deny that the "lower" half can be trained beyond the high school to develop the ability to think critically, to improve their moral character, to become better citizens, or to share in equalized opportunity for individual economic and social improvement.

Our second qualification arises out of Havighurst's use of average intelligence quotients and his references to Minnesota's General College population in support of his hypotheses concerning students' ability to profit by formal general education. Many instrumentalists, supported by specialists in measurement, would question the validity of

the use of the intelligence quotient as applied to young adults of college age for any purpose whatsoever, however valid it may be in certain limited applications to adolescents and younger children. Even if college-level measures such as the psychological, culture, and subject-matter achievement tests are used as bases for judging student capacities to profit by general education, we look upon their results as only single components in the complex totality of an individual student. We cannot accept, on present evidence, the concept of "intelligence" as being a single, unalterable, measureable quality limited to academic, verbal, and quantitative powers of symbolization and abstraction, but, instead, we tentatively hold the hypothesis of several kinds of intelligence, accompanied by clusters of abilities, appearing in a bewildering variety of forms and patterns in the individuals who make up the student bodies of our colleges. A clue to our general thinking on this point is to be found in the report of the distinguished group of psychologists and psychiatrists who made up the assessment staff of the Office of Strategic Services during World War II.⁵ In the intensely difficult task of evaluating candidates for a wide variety of complex and often dangerous tasks, that staff found it necessary to relate the term "intelligence" to any recognized system of mental functions, distinguishing one from the other by an appropriate adjective defining its purpose. Thus, they speak of aesthetic, social, scientific, administrative, and mechanical intelligence. They further conceive of each of these kinds of intelligence as being accompanied in its operation by several separable abilities, such as observational, evaluative, interpretive, conceptual, imaginative, logical, or predictive. Instrumentalists, accepting this view, continue on the endless search for the presence in students of kinds of intelligence other than the scholastic and for means of contributing to the development of any of them through organized general education, not only the *formal* work of the classroom but also the informal experiences of studio, field trips, extra-class activities, and the like. Until, after many years, the possibilities of this concept have been deeply explored, we cannot agree upon such limitations as Havighurst proposes or accept his strictures upon the general college as evidence that any considerable group of high-school graduates cannot profit from formal general education beyond the age of eighteen.

We have attempted in this chapter to cover some aspects of the

⁵ Office of Strategic Services, *Assessment of Men*, pp. 264ff. New York: Rinehart & Co., Inc., 1948. See also, M. E. Hahn and M. S. MacLean, *General Clinical Counseling*, chaps. vi and vii. New York: McGraw-Hill Book Co., Inc., 1950.

operation of functional and student-centered programs against the background of the instrumentalist philosophy of general education. Other discussions of these problems have been presented in other chapters, especially in those of Williamson, Naftalin, Eckert, and Bigelow and in the basic chapters of Taylor, Corey, and Havighurst.

It should be said, finally, that the position presented here does not imply that all of the traditional, essentially classical, rationalistic programs of education should be scrapped. It is important to take an experimental attitude toward such programs as toward others; and it may be that some students thrive in such programs by reason of their particular interests, their personality structure, and the way their minds work. A democratic society needs men and women whose life needs are met in many ways — those whose attachments are to the intellectual and speculative life, and others whose living, thinking, and feeling are directed to human relations, to the creation and appreciation of beauty, to the making and selling of goods and services, to the dissemination of moral and ethical ideas, or to political and social services to the community. But what we, as instrumentalists, seek is the careful selection of those who may profit most, because of their system of values, from one or the other kind of general education. What we ask is that the rationalist and neo-humanist attack with vigor the complex problem of evaluating the results gained from their programs — as instrumentalists by their very philosophical position must do — in terms not only of mastery of knowledge but of behavior, attitude, feeling, and action over the widest possible range. Educators should not accept the voice of authorities or reiterated assertions by those who are not authorities that such training is universally a “good” thing for all students; or that half or more of our people are to be denied any general education at the college level because they are unwilling or unable to study and to profit by courses in the great books or particular syntheses of standard subject matter; or that only rationalistic thinking develops the highest and best kind of human beings who are, by that token, destined to live better and happier lives and perform the leadership role in all the affairs of men. The evidence is not all in. We have had a good time thinking up ways of administering learning. We think the young should accept them gratefully and profit from them. We need still to continue trying to find out how much they accept and what it profits them.

CHAPTER IX

PROBLEMS OF INSTRUCTION

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THE NATURE OF THE TEACHING PROCESS

Instruction in its broadest sense covers a wide range of topics, many of which receive explicit treatment in other chapters of this yearbook. For example, audio-visual aids, the library, teacher training, and similar topics are all part of "instruction" in the larger sense. But for this chapter, the meaning of the term will be narrowed to classroom teaching; and in so far as other aspects are considered at all, they will be viewed from the perspective of the classroom teacher.

The teacher, at least in his more sanguine moments, regards himself as the most important part of the educational machinery. Buildings, curriculums, administrative organizations, books, laboratories, and gadgets may constitute sources of much potential educational power, but the transmission belt which brings this power to bear on the raw material and turns out the finished product is the man with chalk-dust on his sleeves. Quite frequently the teacher feels he is lost in the educational shuffle and does not receive the attention commensurate with his importance. But though the teacher may be slighted personally, his function rarely is. Everyone concedes that it is important, and someone is always trying to improve teaching and teachers.

The very importance of teaching may serve to account for all the attention given to it. But there is also the possibility that the continuous effort to improve it stems from the fact that it is a complicated and recalcitrant problem and that even great efforts produce relatively slight effects. Various reasons have been suggested why improvement of teaching is so difficult. Some have insisted that teachers are born, not made, and that the stork, and not the schools of educa-

tion, has been at fault. Others have suggested that the difficulty is that new problems of instruction are continually arising because of educational and social change or that teaching is continually becoming more ambitious in its efforts so that any solutions achieved soon appear inadequate in the face of the enlarged problems.

Regardless of these possibilities, certainly one cause of trouble — and the one I wish to examine here — is that the mere attempt to think or talk about teaching labors under certain serious handicaps because of the very nature of teaching. These difficulties are inevitable and familiar; yet probably the most fundamental problem of instruction in general education is this difficulty in even coming to grips with the problem adequately.

One source of this fundamental difficulty is the fact that teaching is concerned with the particular. Any instance of teaching involves a particular teacher (with his own peculiar strengths and weaknesses of knowledge, personality, and experience) teaching an equally particular set of particular students some particular topic in some particular educational setting at a particular moment of a particular class hour. It is this particularity which makes teaching an art (in contrast to "science" with its concern for the attainment of increasing generality and abstraction) and which leads teachers to believe that this artistic command of the right particular is to be attained by native endowment, grace, sensitivity, intuition, or long practical experience but not by study or instruction. And this attitude easily leads to a disregard for generalizations about teaching and even to a contempt for them. The practicing teacher will assert that any fool knows better than to write something on a blackboard and then stand in front of it (despite the fact that any day on any campus at least one teacher is making a fool of himself in this fashion). What is the need, he asks, of admonitions by professors of education that students should be allowed at least an occasional peek? But the same attitude affects his reaction to less obvious and more important principles. As Corey has pointed out in chapter iii, teachers and writers about education often show relatively little interest in the findings of educational psychology. Part of this attitude can be explained on the ground that the teacher does not find these generalizations of psychology useful. Sometimes he regards them as mere truisms or platitudes. Even when he accords them more respect, he is still inclined to feel that such generalizations are only a start on *his* problem, which involves the specific application to his own particular courses and students. General findings about motivation, for example, still leave him with the job of

discovering how to motivate these students to work on this problem this morning.

Aristotle stated the issue long ago in his discussion of practical wisdom.¹ If a person knows that white meat is good for invalids but doesn't know of any particular white meat, his knowledge of the generalization does little good to the invalids confided to his care. On the other hand, the man who has found by experience that invalids thrive on breast of chicken may help a great many people (certainly a great many more than the practitioner with *only* the generalization) even though he has only this particular bit of knowledge and no general principle concerning it.

This point, in short, explains in part why attempts to discuss or teach teaching appear, almost inevitably, trite or useless. One cannot talk in terms of all the particulars; one must use generalizations. But before these generalizations can mean much, they must be applied to particulars, though they do not bear on their faces the manner of their proper application. Teaching, in general education or elsewhere, demands a command of both the generalization and its relevant particulars. As in other arts, the generalizations may be commonplace, and only experience gives a knowledge of the relevant particulars. Yet, experience alone is not enough; its particulars must be examined and organized by means of some coherent set of generalizations. It is only as attempts to suggest some of these generalizations that discussions like the present one are justifiable.

A second difficulty in discussing teaching is that it is a fine example of the doctrine of internal relations — i.e., that a thing is its relations. There is no such thing as teaching or a teacher in isolation. A teacher, to be a teacher, must be teaching something to somebody, in some fashion, for some purpose, and so forth. "Teaching" or "the teacher" is these relations. Mark Hopkins must have at least one student on the other end of the log; otherwise he is a thinker, a nature-lover, or a man resting, but not a teacher. The "something," "somebody," etc., used above suggest, of course, the terms into which teaching is usually analyzed: subject matter, students, objectives, methods, and the rest. Since language is irretrievably analytic, some dissection of the process is unavoidable, and I shall shortly utilize such a set of rubrics for a more specific analysis of some of our present problems of teaching in general education. But just as the book on golf, with its talk of cocking wrists, shifting weight, and keeping left arms straight, seems little like the smashing drive down the center of the fairway, such piecemeal

¹ Aristotle, *Nicomachean Ethics*, vi. 7, 1141 b 14ff.

consideration bears little resemblance to the living process. Furthermore, one thing always leads to all the others, and any attempt to discuss single topics or problems individually does some violence to them. This difficulty is especially apparent in any discussion of teaching in general education. As the name implies, there is a wider area of concern — of things which bear upon the teaching process and which must be taken account of — in connection with general education than in connection with more specialized or narrow instruction. Thus, the process of analysis does even greater violence to the topic in its division of this larger whole.

A third difficulty in the discussion of teaching is connected with the problem of particularity, which we have already seen, and lies in the fact that teaching moves between conflicting and often contrary principles. These poles are familiar, and the chapters by Taylor, Corey, and Havighurst have presented many of these conflicts. Probably every teacher realizes that the student's present educational experience must fit his present capacities, interests, and fund of experience; on the other hand, most teachers feel that the fit must not be too easy or else the experience is no longer educative. If a man's reach is to exceed his grasp, the student must be stretched to a certain extent. This same conflict appears in regard to materials. Of course the student must have materials that lie within his understanding, couched in words he knows; but on the other hand, if the material is completely predigested and written down, he will remain in that same illiterate, ignorant, and thoughtless state in which he came. Not too hard but yet not too easy, not too strange but not too familiar, not too strong but not too mild — these antitheses are familiar to every teacher. And in the same fashion, the contrast runs between intellect and emotions, wants and needs, the pleasure principle and the reality principle, freedom and discipline, the individual and the group, and the other familiar pairs.

There are several ways of dealing with these pedagogical conflicts. One is the familiar method of compromise, the attempt to steer between Scylla and Charybdis. Stretch the student a little but not too much. Give him some freedom, but not license; give him a task which challenges him but which is not wholly beyond his power. In so far as classroom teaching handles these problems by compromise, it is impossible to talk about them very meaningfully in general terms. As Aristotle long ago pointed out in his discussion of the ethical mean, the principle is easy; the difficulty is to apply it to the particularities of a given situation. Anyone can tell a young teacher — or an old one

for that matter — "Don't be too demanding of students, but, on the other hand, don't forget that you have some responsibilities for their education." It doesn't help him much. The problem for that teacher is to decide how demanding to be on this particular occasion with this student in regard to this general situation. Reminding him of the principle and of the extreme positions may help slightly, but the real task lies in a particular compromise to be brought about. In so far as teaching in general education must solve its problems by compromise, discussion and communication will be of little avail; the particular forces to be compromised in the particular situation will be dominant. This is one reason why new programs seem to start from scratch and to insist on making their own mistakes. Solutions by compromise are local and particular.

Much the same is true of the method of alternation: e.g., a little work should be followed by a little play; a difficult task followed by the relief of an easier one. The problem of how rapid the alternation should be can be solved, of course, only by consideration of the particulars of the situation.

The third procedure, that of agglomeration, works in a slightly different way. By agglomeration I mean the technique by which the teacher avoids committing himself to any position by hurling at the learner a mixed assortment of whatever is involved, including both extremes and a number of intermediate varieties. Offer him some hard tasks, some easy ones, and some intermediate ones, and let him take his choice. Thus the teacher avoids assuming any more responsibility for his student's education than the proprietor of a cafeteria does for his patrons' diets. From the teacher's point of view this method is one way of handling the problem of conflict, but it is at least paradoxical in that it is a handling of the problem by avoiding it. Some teachers insist that the student is the best judge of his own education; this statement can be true only with considerable qualification. Some would justify this procedure on the ground that it puts the responsibility for choice or compromise on the proper shoulders, those of the student concerned. But the educational situation seems to imply that some help will be given the student. In any case, if this procedure is adopted in its extreme form, the teacher has little need of suggestion as to how to prepare this assortment, for it is easily done and his life becomes easier in direct proportion to his shedding of his educational responsibility.

The fourth method of working with these conflicts should be more familiar in educational circles than it is, if only because of John Dewey's utilization of it. This method seeks not a compromise be-

tween the contraries or some alternation between them, but a new synthesis which comprehends and transcends them both. Dewey states this procedure most explicitly in the Preface to his *Experience and Education*:

It is the business of an intelligent philosophy of education to ascertain the causes for the conflicts that exist and then, instead of taking one side or the other, to indicate a plan of operations proceeding from a level deeper and more inclusive than is represented by the practices and ideas of the contending parties.

This formulation of the business of the philosophy of education does not mean that the latter should attempt to bring about a compromise between opposed schools of thought, to find a *via media*, nor yet make an eclectic combination of points picked out hither and yon from all schools. It means the necessity of the introduction of a new order of conceptions leading to new modes of practice.²

The method is also obvious in the pairs involved in some of the chapter titles for his earlier *Democracy and Education*:³ "Natural Development and Social Efficiency as Aims," "Interest and Discipline," "Experience and Thinking," "Play and Work in the Curriculum," "Labor and Leisure," "Intellectual and Practical Studies," "The Individual and the World." In all these instances Dewey seeks a dialectical resolution of the conflict. So, for example, in regard to work and play, the child who most enjoys his play works at it: He shows the same concentration, absorption, and perseverance which mark the best work. On the other hand, the best work is not done grudgingly as drudgery but has many of these same elements which the best play has. In short, what is sought is not a compromise between work or play, or an alternation of first work then play, but a resolution of the conflict which includes and transcends both conflicting elements.

Whether this method is satisfactory is disputable.⁴ Those who admire Dewey the pragmatist usually feel most uncomfortable about

² John Dewey, *Experience and Education*, pp. v-vi. New York: Macmillan Co., 1939.

³ John Dewey, *Democracy and Education*. New York: Macmillan Co., 1916.

⁴ In this general connection it is interesting to note in a recent work that Dewey speaks more modestly about this procedure than one would be led to expect in view of his intensive utilization of it: "Our own procedure is the *transactional*, in which is asserted the right to see together, extensionally and durationally, much that is talked about conventionally as if it were composed of irreconcilable opposites. We do not present this procedure as being more real or generally valid than any other, but as being the one now needed in the field where we work." (John Dewey and Arthur F. Bentley, *Knowing and the Known*, p. 69. Boston: Beacon Press, 1949.)

this Hegelian inheritance from Dewey's earlier years. There is always an element of paradox about this attempt to combine conflicting or contrary elements. Its appeal lies in the fact that it is creative as compared with the fundamentally stodgy and unsatisfactory methods of compromise and alternation. For, at best, all compromises are uneasy, temporary, and highly specific.

If this proves an acceptable method of working with some of our educational conflicts (and I personally believe that this is possible), then general education especially can profit from it. General education has been, in many instances, the product of conflicts (educational, social, and intellectual), and the easiest way to pacify the contending forces has often been the mode of compromise. As a result, the unsatisfactory aspects of general education, whether in general or in particular programs, can in large part be traced back to the uneasy compromises embodied with it. Creative and systematic thought in regard to general education will have to go beyond local pacifications of conflicting principles. This method of dialectical resolution is not easy, but it seems likely to do more for a theory of teaching in general education than do the other methods.

To sum up, then, any attempt to talk about teaching or to make meaningful generalizations about it suffers from certain difficulties inherent in the subject, and these problems are fundamental in any effort to analyze further problems. But perhaps this much specific consideration of the difficulty will make the following analysis somewhat more meaningful.

OBJECTIVES

Educational objectives are important primarily because they guide teaching. This fact has two consequences: First, objectives must be stated in such form as actually to serve as guides; otherwise there is little point in stating them. Second, shifts in objectives should be followed by appropriate shifts in teaching; if not, either the objectives are spurious or the teaching is misdirected. Some present problems of teaching in general education are related to both these consequences.

Sometimes what has been glorified by the phrase "the introduction of a program of general education" has meant little more than the typographical relabeling and regrouping of old courses in the college catalogue. In these instances the earlier objectives and the statements of them continue to serve as well as they did before. But where the idea of general education (vague and varied as that may be) has been taken more seriously, espousal of general education has usually

been understood to involve rethinking and recasting of course objectives. Whatever general education has meant to particular institutions, it has tended to stress aims related to more general areas than specialized (particularly professional or preprofessional) competence. Havighurst has cited five aims on which there has usually been agreement. But such statements are general. The teacher of Physics I has wondered whether his old materials and methods were exactly those best suited to enabling the student "to develop a critical intelligence, capable of being applied in many fields," while his colleague, who is teaching Philosophy 101, has asked himself similar questions in the face of enabling the student "to develop and improve moral character." How much change was necessary has depended, to be sure, on the nature of the old course; and, in any case, how much alteration was called for is usually a disputed question. Many teachers have indignantly insisted that their old courses were not so totally unrelated to the general needs and interests of students as is sometimes alleged.

In any case, the objectives of general education still need considerable reworking by the classroom teacher from the point of view of his own operations. I do not base this remark on extreme examples like the one I met a dozen years or so ago. In that instance a professor, attending a summer workshop in general education and being asked about his objectives, replied that he had stated them at the request of his dean, had filed them in the dean's office, and would be glad to write for a copy if we thought them useful. Though admittedly extreme, this example does suggest what appear to be too-common phenomena—that the objectives of general education often receive lip-service (or more accurately, pencil-and-paper homage) but they do not rule the classroom, and that interest in general education and thinking about it are too often developed at the upper administrative levels and have filtered down into actual classroom procedure only by seepage. One has only to listen to administrators or to see the results of questionnaires sent to them to discover that getting faculty co-operation and support is one of their major concerns in establishing and maintaining programs of general education.

One reason for faculty reluctance and bewilderment is merely one incarnation of the problem we have already seen, the problem of relating the general and the particular. In so far as the objectives of general education have tended to be stated in rather general terms and in relation to large areas in the life of the student, the instructor frequently has had difficulty in finding in them directives for what he should do in his 9:00 o'clock class on Monday morning. Feeling the

lack of such guidance, he tends to fall back on the traditional aims and procedures with which he is familiar. The solution of this problem lies, then, in getting an adequate chain of objectives at different levels of analysis, running from the general statements which guide the whole program to the more specific ones for each course, with the latter clearly showing not only their general relation to the former, but also their exact contribution. This solution does not mean some simple-minded, overly mechanical schedule whereby every instructor works on objective No. 10 every Tuesday at 9:23 A.M. Nor does it mean mere paper work to pacify a dean. It does mean that the objectives must be stated in such form that they guide both instructors and students at every class hour, that they make clear the relation between what is going on in class and the general aims of the program.

METHODS

The second and more important point concerning the relation between objectives of general education and teaching has produced a significant change in classroom procedures and hence can better be discussed under the rubric, "method." Without refurbishing the old charge that education, before the rise of the general-education movement, had become overly or exclusively concerned with facts, it is probably fair to say that it had been considerably concerned with them. Some evidence on this point can be seen from the tendency of early attempts at general education to take as their starting-point some such statement as "what every educated person should know for effective personal and social living"; and the survey courses of twenty years ago plainly show this orientation toward fact. But any attempt to live up to this slogan was soon seen to be doomed to failure. Though such knowledge might be desirable, no set of courses within a limited time could deliver it; and there was some justification for the charge of superficiality which was often brought against these early efforts.

If, then, general education could not retail all these facts to the student, possibly its function was to prepare him to get them for himself—not so much to discover them for himself as to enable him to be an intelligent consumer of them. For this sort of outcome, the lecture method had certain obvious shortcomings. Hearing someone else recount how he found, organized, and evaluated facts was far from adequate help for the student in undertaking his own discovery, structuring, or evaluation of them. A student of piano may get much inspiration and a few pointers from witnessing a masterly performance

of one of the Prokofieff concerti, but concert-going is no substitute for hours of keyboard practice. Laboratory work in the sciences had always been based on the idea that nothing could substitute for the student's working at firsthand with materials; it seemed likely that, in working with ideas, attitudes, and skills, the student should follow the same principle — work with them at firsthand for himself.

Quite apart from developments within general education, an increasing sophistication in science and philosophy regarding the nature of "facts" was providing additional support for the principle of "first-hand" knowledge. Facts had tended to be treated in general education (even if they were not actually so misunderstood by instructors) as self-existing entities, propositions which could be flatly asserted about the universe and retailed to students as "scientific knowledge." Scientific developments, especially in physics, brought greater emphasis on the view that "facts" are only the end products of a process of inquiry and that the status of these facts is directly dependent upon the manner of this inquiry, the type of material or phenomena so handled, the general matrix of terms and assumptions within which this inquiry is conducted, and other components of this experimental context. To give "facts" to students apart from this context is, then, to hand them mere *disjecta membra*. To know what the facts *mean* (in almost any sense of that much-used and abused term), they have to know how the facts have been sought and presumably established.

All these influences were partially responsible for the increased use of the so-called "discussion method." Probably no aspect of general education is so much misunderstood. I sincerely hope that the remark of one of my colleagues is unique: "I know all about the discussion method; when you haven't prepared for a class, then you say 'Let's discuss.'" But without descending to this nadir, sources which are presumably better informed produce comments indicative of equal understanding. Typical are statements to the effect that the use of the discussion method frees the teacher from the hours of preparation necessary for a first-rate lecture.

A lecture involves the selection and organization of a body of material in that structure which seems appropriate, useful, and congenial to the lecturer. As any one of us knows who has ever delivered a lecture of any pretensions at all, the writing and delivery of one requires much labor and skill. But does discussion require neither? The question is so rhetorical as to be absurd. With an infinitely more complicated set of tasks to perform on the spur of the moment, the discussion leader must have his material even more at the tip of his

tongue than does the most fluent lecturer. Furthermore, the lecturer defines for himself the area which he will cover; even if questions from the class are permitted or encouraged, their scope is somewhat restricted by the material of the lecture. A discussion runs in no such groove, and the leader must be prepared to handle a much wider spread of topics. To be sure, there is the quasi-discussion which, on my own campus, is known as the lecture-in-the-interrogative-mood. In this travesty of the discussion method, the leader produces the appearance of discussion by eliciting the material from the class by a series of questions. But these contributions from the class constitute little more than the fitting of the class's bits and pieces into a form-board prepared by the leader.

Organization of a true discussion is a much more complex matter than that of a lecture. The lecturer organizes his material in what seems to him an appropriate structure; and by the use of such time-honored gimmicks as "There are three aspects of this problem; the first is . . ." he can make certain that the headings and numbered paragraphs of *his* organization get down in the notebooks with only that amount of distortion, misunderstanding, and mishearing ("According to the Freudian view of the development of the personality, children reach the close of their edible period at about age six.") which is apparently inevitable. Whether his organization means anything to the student is another matter; the assumption the lecturer makes is that it had jolly well better.

The leader of a discussion endeavors not to thrust his organization on the group but to make them evolve a coherent structure of their own. If several schemes are offered simultaneously, his task is to get the students to perceive them, to sort them out, and to see grounds for choice between them. If irrelevant material is offered, his job is to get the student to see why it is irrelevant or to make a case for its relevance. All this requires a split-second perception of what is being said, an organizing skill so adept as to be unconscious, and a high degree of empathy with each speaker so that his contribution is taken as he meant it and not as it can be twisted by the leader into what seems to him a more convenient form. Small wonder there are so few good discussions!

A passable lecture is within the power of almost any instructor willing to devote the time and effort to it, and skilled practitioners have long been famous for their consistently high level of performance. Why, then, adopt a procedure which often completely lacks the unity, coherence, and polish of the lecture? We do so simply because the

discussion promises to do more toward the attainment of some objectives of general education than do other methods at our disposal. The student is to learn how to cope with scientific facts, art objects, philosophic principles, and the rest. The discussion gives him a chance to try his own hand, not watch teacher do it. In his first endeavors in a discussion section he has the assistance of his classmates and the teacher. A discussion is not a bull-session. It should not wander too far afield since it centers around some problem, topic, or work; and though loose, its structure is not amorphous since the leader's task is to see that something coherent emerges. Though the student is primarily responsible, he is not self-sufficient; the leader's job is to define this responsibility for him in terms of professional standards of relevance, accuracy, and coherence. By doing the work himself under this kind of supervision, the student gets some insight into the requirements of an adequate treatment of the problem as he sees it and the differences between his approach and the other possible procedures espoused by his classmates.

Evaluations of the discussion are still in rather primitive stages. Most of our measuring sticks are rather wooden and must be applied rather mechanically. One common criterion is that the more students who participate in a discussion, the better. Yet obviously a student following a discussion attentively can gain from it even though he never opens his mouth; and some of the most vocal contribute only confusion. On the other hand, studies show clearly that often the seemingly alert student at the far end of the table has wandered off on some train of free association wholly unrelated to the discussion, a private phantasy initiated by some chance word or event. But this happens in lectures, too, as shown by the "doodles," or lack of them, in lecture notes; the lecturer's pride is saved, however, since he can continue with his incisive comments and rolling periods unhindered. In any event, we still need much more precise knowledge of what goes on in a discussion section, better criteria of what constitutes a good discussion, and more skill in using these criteria in evaluating such classes.

The discussion method is not a panacea for all the ills of general education. Possession of a college appointment does not automatically make each of us a Socrates; nor does the opportunity to share in the discussion make every student an eager seeker after truth. No educational phenomenon is more distressing and absurd than a discussion of material which students have not read, of problems they have not bothered to consider, or of experimental findings they have not pro-

duced or examined. Sooner or later (usually sooner) every discussion leader encounters one of these sessions and feels he must give in to a paranoid urge to shoot all the students and then himself. But such sessions, even the most hideous, can be educational as the student comes to realize that the responsibility is truly his. In so far as general education aims at preparing the student for further education throughout his life (and not at giving him a bundle of answers which he can cherish ever after and produce when prodded by the appropriate question), his assumption of responsibility is an indispensable requisite for his learning very much more. But pushing this responsibility onto students does not absolve us from solving our own problems: determining the aims and materials for which discussion techniques are most appropriate, securing better standards for evaluating discussions, and getting greater skill in conducting them satisfactorily.

THE STUDENT

Of the many considerations involving the student in regard to instruction in general education, probably the most fundamental one can be hung on the familiar catch-word, "the whole student." As the earlier chapters by Taylor, Corey, and Havighurst have indicated, the question revolves about conflict which may be stated in the contrasting terms "the disembodied intellect," on the one hand, and the "whole student," on the other. What I shall label the "intellectual" side of the issue usually asserts that education is properly concerned with certain bodies of knowledge and certain intellectual skills. Thus, the student should learn something of the knowledge and procedures current in the sciences, but such things as what childhood traumata prevent his acquiring this information, what he thinks about science, or whether he uses "scientific method" in selecting a toothpaste or a wife is not in question. Similarly, adherents of this view suggest that the student should study social phenomena, should know what the present and historical facts of social life are and how they are arrived at, but that how he may vote or even whether he votes in later life is something with which formal education is not properly concerned. The student's private life, it is often said, is his own; guilt over petting or illicit pregnancy is not the legitimate concern of the teacher of humanities, social science, or science. Proponents of this view hold that formal education has no business in these areas of the student's personality; or that, even if it has, it is ill-equipped to operate there. In their opinion, teachers, libraries, laboratories and the other apparatus of formal education have little to offer in these areas. If the teacher, not the

average teacher but the best, has any special skill, it is probably not as a therapist nor as a wise guide to his life; his claim to pre-eminence rests on certain knowledge and skills connected with certain subject matter. To ask him to function otherwise is, in their opinion, to miscast him.

The psychological arguments which lead to some modification of the extreme statements of this position have already been reviewed by Corey in chapter iii. Personality, the emotions, or whatever we choose to label this nexus does become involved in learning. The intellect is not, of course, disembodied however much we try to concentrate upon it chiefly or to treat it separately for the sake of greater simplicity or efficiency. But, on the other hand, the most extreme position on the importance of personality reduces all knowledge to a psychological study of why a certain individual comes to believe as he does about the universe. In the older view undue emphasis on the object of knowledge (or known) seemed to some to imply a denial of the knowing subject (or knower) or a denial of the importance of his thoughts and feelings. The more extreme cases of the recent position reverse the field and get perilously close to a solipsistic denial of the reality of the known, the external world. Man, any man, becomes the measure of all things, and the universe becomes whatever his "experience" or his "feelings" lead him to want it to be. Both philosophy and psychology know better than either of these simple-minded extremes. It is time education did so too. This whole issue is typical of those involving conflicting elements or principles, and the present state of the issue is equally typical of the too-frequent result of following the procedure of compromise. "Let's not stress the intellect too much, but let's not stress the emotions too much either." The result is a series of highly individual balancings which scarcely please even the one who effects the compromises. An adequate solution will entail more than some emotion and some intellect; it will involve a synthesis of them which is more than either.

But a more important problem is a somewhat different aspect of this general topic and involves the relation between education and psychotherapy. This issue differs from the preceding in that there the question was how much account we should take of emotional forces. Here the suggestion is not merely to take account of them but to deal with them directly and primarily. It involves a real shift of emphasis in that producing emotional maturity or better adjustment in students becomes a major, if not the major, aim of general education. These are not the same problem, but they are readily confused. In

fact, present discussions are often as lively as they are only because of this confusion.

Should a discussion section be an example of group therapy and is the good teacher the good therapist? It goes without saying that the way in which these questions are answered will make profound differences in the material, organization, and procedures of general education and in the selection of training of teachers for it. In view of this importance of whatever answers are given, it behooves us to have a better set of them than we at present possess. Too often now the speaker's answers are more closely related to his personal psychic economy rather than to the more general issues of the case.

Our ultimate general answers will need to be based on a much more careful analysis and study of such questions as: "Are the aims of education and psychotherapy the same?" "Are the relations between teacher and student those that exist between patient and therapist?" "Are the conditions the same?" Theoretical questions of this sort will need clearing up before we turn to the practical questions, such as whether present facilities, teaching staffs, and the rest make an affirmative answer practically possible in the near future even should it prove theoretically desirable.

Even a decision that education and therapy are different need not imply the consequences sometimes alleged. Education need not be traumatic and can be detraumatized without becoming therapeutic. Teaching may also learn much from therapy without being or becoming therapy. Techniques of group therapy, for example, may have great value for teaching when they have been transmuted so as to function for educational ends or in educational conditions.

As long as the popular interest in psychology and psychiatry continues, these issues will continually be raised — quite properly — in connection with general education. But at present one can only join the dying Goethe in pleading for more light (and less heat).

MATERIALS AND ORGANIZATION

The problems of what materials are best used in courses in science, social science, and humanities in general education demand such particularity for discussion that they do not lend themselves to treatment in such a general survey as the present chapter, even were the author competent in the range of fields involved. But the materials and organization of the whole enterprise can be discussed at this general level, and indeed, must be, for here lies what is probably the most pressing problem of general education at the present time. Many

colleges think they have solved satisfactorily, for themselves at any rate, the problems of content and organization of individual courses, but there is much less complacency about programs as complete units. In chapter iii, the quotation from Eurich cited by Corey lists seven of the principles which are often espoused.

Unfortunately, integration plays much the same role in educational circles which the weather performs among the public at large; it figures prominently as a topic of conversation and concern, but it proves refractory when we seek to manipulate it to effect the kind we want. The sad difference is that we can always be sure of having weather of some kind; whether this is also true of integration is at least debatable.

Under the old system of completely free election, teachers feared that little integration took place. At worst, the student took brief, disconnected courses, chosen somewhat at random, and he promptly forgot each one as soon as he had passed the final examination in it. General education has usually attempted to improve this situation in several ways. It has offered larger units; courses often cover a full year rather than the single quarter or semester of the older system, and sometimes sequences run several years. Thus the units are at least larger, and examinations over these larger units encourage the student to tax his memory more than was once necessary. More important, the offerings have usually been planned as a coherent program; and, more rarely, some course or group of courses has been especially assigned the task of integrating the whole. Whatever is done or deemed desirable here, however, at the level of administration or curriculum-planning, integration may remain largely potential rather than real; it has a better chance of actually occurring if each classroom teacher is doing something about it in his operations too.

There are, of course, those who doubt the wisdom of the teacher making any such attempt. They believe that the student must achieve his own integration within whatever structure is congenial and appropriate to him and that the teacher should stay out of the way, sticking close to his subject-matter last. But the same objection can be raised concerning any learning. As we Hoosiers used to put it, "You can teach a pupil but you can't learn him." The student must learn for himself; and to a considerable degree he selects what, when, and how he will learn. Teaching is at best an attempt to facilitate this more or less private and personal process. The same is true of integration. In so far, then, as general education is seen as more than a bundle of knowledges, skills, and abilities which are useful individually but

have little meaning as a unit, helping the student make some kind of integration of his general education is part of the classroom teacher's job. It is certainly that part which he is furthest from performing adequately.

This failure does not arise from inattention or want of interest but from some very real difficulties inherent in the situation. If the teacher is to integrate these knowledges and skills, he must have at least a speaking acquaintance with them himself. Many teachers in general education today do not possess such an education. This situation is improving. Those of us with more specialized backgrounds are learning by doing and through various types of in-service training. Young teachers, themselves the products of general-education programs, are also manning the courses in increasing numbers. Nevertheless, most institutions should be doing more to remedy this state of affairs than they are, particularly in the education of their existing staffs. Individual initiative and administrative support must complement each other more than they have in the past.

But even the existence of a teaching staff whose members possess integrated general educations of their own is far from a sufficient condition for aiding students in achieving their integration. The teacher must have more than familiarity with the general areas within which the student has worked. Such acquaintance may enable him only to display his own education to his classes or make vague gestures in the direction of integration. He can best make clear to the student the relations between segments of knowledge, the applications of certain methods or skills to diverse subject matters, and the like, if he has a fairly precise idea of the particular context in which the student met the item to be related. Even in programs of general education, students are distressingly ready to consider each previous course as something past and forgettable or are surprised that a teacher, labeled in the college catalogue as a social scientist, should ever ask about something once studied in a biology class. This inertia is at least partially overcome if the teacher knows fairly well what the student should be able to recall in order to relate it to this new matter of the present class.

This ability is, however, easier to describe than to achieve — like so many others which are important in teaching. As general-education programs have become larger, the staffs of particular courses frequently become rather isolated and see little of the program beyond their own unit. As programs grow older, staff turnover brings newcomers who have a less comprehensive view than the older teachers, who often

were those involved in planning and instituting the program originally. And even under the best circumstances, as courses are modified and revised, the students' experiences change; and instructors in other courses must be brought up to date on what is now being done in, say, the humanities course. This is a large order and places a considerable load on the institution. If instructors must not only carry their own teaching and research loads but must also keep themselves informed about the rest of the general-education program, administrative provision has to be made for learning. The usual devices (dissemination of material, provision for visiting, interstaff meetings, and the rest) must be used hard, and participation in these efforts must be considered part of the academic load. These things cost time and money. But if integration is to be more than a word in the jargon, efforts of this sort must be constantly and consistently made.

In regard to integration, I should also like to anticipate my following comments on evaluation and to remind the classroom teacher that integration will mean little in the life of either student or teacher unless it has a place on examinations. As Corey has implied, it is hard to believe a college takes an objective seriously if no attempt is made to measure its attainment. Students certainly believe that if they aren't examined on something, teacher must think it is not very important. When teachers of general education write examination questions involving integration and students are required to answer them, then we can be more certain than is possible at present that to either party integration in general education is more than one of those deified abstractions to which the Romans paid homage.

EVALUATION

Though under many schemes of general education the preparation and administration of examinations is the duty of special bodies or groups (research bureaus, boards of examiners, and the like) and though measurement receives treatment elsewhere in this yearbook, evaluation is fundamentally a problem of instruction. The most ingenious testing devices and the most impressive array of electronic equipment are fulfilling only a part of their function — and a relatively unimportant part at that — unless classroom teaching is affected. The teacher cannot do better unless he knows how well he is already doing in regard to what.

The introduction of programs of general education raised several problems for the classroom teacher. In the early days he was sometimes far from sure just what sort of achievement he was trying to

measure. As he became more certain on these points, however, other difficulties arose. There seemed general consensus that he was now more directly concerned with certain general skills, attitudes, and beliefs than he had been before. To be sure, he had never been unconcerned with them. Instruction in any field had usually assumed that knowledge of that material would lead students to acquire certain broader, relevant skills, attitudes, and points of view. But primary emphasis had tended to be on the material of the field; these other outcomes were desirable by-products, thought to be more or less inevitable consequences. But with the coming of general education, primary emphasis shifted to these other matters. Since the whole undertaking stood or fell on the basis of the attainment of these goals, considerably more skepticism was evinced concerning the inevitability of their attainment. The question was not whether students knew physical science, sociology, philosophy, art, history, and the rest, but rather whether they were critical thinkers with proper social attitudes, ability to enjoy the arts, and the like.

Teachers were not accustomed to measuring these outcomes; and, hence, much effort has been devoted to attempting to develop adequate measures of these objectives, particularly measures which possess some degree of objectivity. If these undertakings have not produced measuring instruments to make the eye of the test-technician gleam, work on them has brought some insight to faculty members which will ultimately reflect itself in improved classroom teaching. For example, as groups of teachers have considered attitudes, a sudden awareness has come over them that they are less prepared to specify *the* proper set of attitudes for a field than they sometimes appear. The dogmatism which may have sometimes marked their efforts in class is less easy in co-operative work with their colleagues.

Two paths have, then, been open. One has been an attack on negative attitudes, misconceptions, blocks, and prejudices. Though teachers in general education may not be able to agree as to which attitudes, beliefs, and the like are the proper ones, they at least tend to agree that certain ones are based on misconceptions, lack of information, or unthinking prejudice and constitute a bar to further progress. The discovery and eradication of these misconceptions can be a common task shared by those of very diverse positive views. The past fifteen years have seen the production of many of these instruments both on a local and a national basis. Because this kind of material can be marked good and bad and lead to numerical grades, we shall undoubtedly see more of it.

A second development has been the inventory. This term is not a mere elegant pedagogical variant for "test." A test has traditionally implied a set of right or wrong answers in relation to which a student can be passed or failed. The inventory, on the other hand, rests on no such assumptions. It attempts merely to be descriptive, allowing the student to delineate himself and his views. A teacher or an institution can always, of course, decide that only some of the possible patterns are acceptable and can undertake to inculcate these and exterminate the others; but by and large the inventory has been used to enable a student to draw his own profile, so to speak, with the understanding that any view or position is acceptable, provided only that it is taken and defended intelligently. Work on instruments of this type is still in the pioneering stages; and the technician can find much wrong with them. But for the purpose of this chapter the important consideration is what they offer or promise to offer the classroom teacher.

Since the objectives of general education are usually stated to some extent in terms of attitudes and beliefs, how can the teacher know what he has to work with unless he has some adequate knowledge of the attitudes, for example, which are pertinent to the area in which he is working? How can he know that the student is any better off at the end of a year or four years without some relatively objective data on the changes he and his colleagues have produced?

Classroom teachers have, however, proved to be somewhat shy of such measures—for various reasons. Some teachers are opposed to the emphasis on attitudes and beliefs on the grounds that it constitutes an invasion of the student's privacy or that it involves a misconstruction of the task of education. Others, though they favor the effort to improve or alter beliefs and attitudes, despair of the possibility of much direct teaching and examining in connection with them, feeling that such efforts are attempts to weigh the imponderable, scrutinize the inscrutable, or state the ineffable.

In most general terms, however, I believe, the situation can be stated somewhat as follows. The teacher finds himself in something of a dilemma. On the one hand he hesitates to renounce all regard for or concern with attitudes. To take but one example, he has always considered arousal of interest in his subject matter and the production of affection for it (certainly an attitudinal matter) as one of his tasks—even if not a primary one. Teachers of science have often hoped that their students would think and act more scientifically in all areas of life because of some introduction to scientific procedures;

teachers of the social sciences have hoped that their students would be better framers and judges of public policy; and humanities teachers have hoped that their students would better appreciate and enjoy the arts. At any rate, these outcomes could always be cited in defense of the study of some particular subject matter and were handy bits of ammunition in battles over whether the subject was important. But teachers, unlike the commodity dealer, were not explicitly committed to deliver at a future date. Taking these directives seriously — that is, teaching for them and testing for them directly and openly — would commit them.

To state the matter most brusquely, then, it is understandable that teachers prefer to keep a noncommittal freedom of talk and action. Any success a teacher thinks he has in helping students achieve these objectives is all to the good, but he does not have to face up to any demonstration that he has not really done much about them or that he cannot do much. But there is the other side of the picture. Despite the obvious diversity of programs of general education, many of them do make some commitment to the development of attitudes, and to a certain extent (the precise amount is in our present position impossible to ascertain) students, parents, administrators, boards of trustees and the like have taken this talk seriously. Thus, the general-education movement in its various guises owes something of its rise and strength to the popularity of these very objectives. In so far as this statement is true, a day of reckoning and demand for delivery will ultimately come. If general education is seen as a means of producing a group of educated citizens with the "proper" beliefs and attitudes (however "proper" may be defined), then general education must ultimately show that it is capable of producing those beliefs and attitudes. The major problems of both teaching and evaluation lie here.

But evaluation can apply to teachers as well as to students, and certainly one of the pressing problems of general education is to secure better means of evaluating teaching. Teaching ability, rather than competence in research or administration, is presumed to be the primary criterion in selecting and promoting staff in general-education programs; but any talk about "good" or "bad" teaching implies a much more valid and reliable measurement of this ability than we now possess.

In turning from evaluation of students to evaluation of teachers we may seem to have already done part of the job. On the principle of "by their fruits ye shall know them," the best teachers should be those who produce the best students. When grades are not directly assigned

by the teacher alone and are comparable from section to section of a course, the relative success of the students should be something of an index of the skill of the various teachers; thus by evaluating student achievement we should simultaneously evaluate teacher achievement.

Though such comparisons are a partial measure of teachers' efficacies, they are far from adequate. Too many other factors figure in the situation for the results to be valid. Teachers of established reputation often attract the better students where the students have any choice among instructors. Thus, good though these teachers are, they are made to appear even better because of the quality of the students they attract. Furthermore, the faculty are not the only teachers. Often students teach themselves and teach each other. Intensive review, individually or in groups, pondering over collections of old notes, and similar procedures all may produce student achievement beyond that for which any classroom teacher can take credit. The students of Professor A, a master teacher, may so adequately serve as surrogates for him in informally educating the unfortunate students of Professor Z, who is utterly incompetent, that the differences between A's and Z's students may be undetectable by the rather crude measures we customarily use in grading. Sometimes the students of an inadequate teacher are well aware of his shortcomings and make special effort to supplement their instruction from these other sources. Since, by their very natures, these other influences on student achievement are difficult to eliminate or control, evaluating teaching by scrutinizing the product will probably never be wholly satisfactory, though further work in this area will certainly improve our present knowledge about effective and ineffective teaching.

Despairing of measuring the effectiveness of teaching through measuring the product, others have sought to examine the process directly. The familiar difficulties here are that the various sources of data give only a partial picture and that each is subject to its own biases and gaps. Students have a close and accurate view of much of the teaching process; but they can confuse education with entertainment, with displays of spurious erudition, with a warm and friendly environment, or with a pleasant state of dependency.

A man's colleagues, particularly in programs of general education where large staffs work closely together on the same materials, problems, and examinations, can often form rather accurate estimates of his teaching procedures and abilities. While their greater experience and sophistication makes them somewhat less subject to the students' confusions, they are misled in their own way. They may, for example,

be impressed by the insights he gives them or the skill with which he works among his peers; but his work with students may be of quite a different character.

A third source of judgments concerning the teaching process are administrators. By grapevine from students and faculty, they may get a fairly comprehensive sample of opinion; but these come at secondhand, and most of the administrator's firsthand judgments are based on activities of the teacher outside the classroom — e.g., committee work or administrative duties. Occasionally the administrator can find time (and teachers permit him) to visit the classroom, but this practice is still the exception rather than the rule.

A source of information often overlooked is the teacher himself. Probably no teacher faces classes week after week without reaching some estimate, more or less conscious, of his strengths, weaknesses, and problems. True, most books and articles on teaching are written by teachers who naturally draw on their personal predilections and experiences. But very few of the studies of teaching effectiveness, which sample student opinion about particular courses and particular instructors, present also the instructor's side of the picture: what he tried to do (in contrast to what students thought he was doing), his estimate of his own effectiveness under the circumstances, or his judgment of students' response to various devices he tried. Though he may not be an impartial judge, he is an important factor in the situation and a well-placed observer.

In short, the judgments of the teaching process are all partial and tend to be biased in one fashion or another. Improvement apparently lies in the area of refining and combining more adequately than we have in the past the information obtainable from all these sources.

The preceding pages have touched on only a meager sample of the problems of teaching in general education. Although I have endeavored to select that sample on the basis of my best estimate of general interest and importance at the present time, personal interest and experience have undoubtedly played a larger role than I realize in making the choice of so few topics from so wide a range of possibilities. After all, every problem of general education somehow ultimately comes home to classroom teaching, and this entire yearbook could be rewritten from the perspective of the teacher. Solutions of these problems in other perspectives will help the teacher in his grappling with them; but there always remains his aspect of the problem to solve. More adequate philosophic doctrines, more extended psychological research, improved curriculum structure, and the rest result in

better general education for students only when they affect the activities of the classroom teacher — when he *does something* about them and because of them. For, like the infantry, it is the classroom teacher who ultimately wins and holds the educational ground.

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CHAPTER X

PERSONNEL WORK AND GENERAL EDUCATION

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INSTITUTIONAL PROGRAMS AFFECT PERSONNEL WORK

A number of writers ^{1, 2} have pointed out that personnel work finds its foci, its scope, and its limitations in terms of the institutional program of which it is a part. Although, as Taylor points out in chapter ii, it is almost impossible to identify specific institutions where philosophies of education may be found in their pure form, yet trends toward differing philosophical foundations can unquestionably be seen in present institutional programs, and the resulting types of institutional programs drastically influence personnel work as it is carried on in those different institutions.

PERSONNEL WORK AND RATIONALISM

Educational institutions strongly colored by a rationalistic philosophy hold as their sole aim the cultivation of man's reason. Educators subscribing to this view have no doubt as to what they want from personnel workers. Above all, they want the personnel worker to select for them students who will have the capacity to deal intelligently with the abstract, verbal materials which the college aims to teach. The personnel worker desired as a staff member in this type of program is the one who is highly trained in tests and measurements and who can handle statistics sufficiently well to know just how to skim from high-school graduates the intellectual cream that is coveted.

¹ Esther Lloyd-Jones and Margaret Ruth Smith, *A Student Personnel Program for Higher Education*. New York: McGraw-Hill Book Co., 1939.

² Paul J. Brouwer, *Student Personnel Services in General Education*. Washington: American Council on Education, 1949.

One college, which two decades ago turned toward a rationalistic philosophy of education, brought in personnel workers to help develop the program. These personnel workers undertook a study of the qualities of the students who succeeded and those who failed in meeting faculty standards of excellence in reflecting upon, analyzing, and manipulating ideas. After this, by a careful use of psychological and educational tests, they undertook to increase the proportion of students in the college who were high in those abilities that would help them succeed. They were fortunate in having enough students applying for admission to be able, thus, to select and reject. The results of their objective evaluations demonstrated conclusively that the personnel workers had succeeded in raising substantially the level of abstract intellectual ability in the student body as a whole. Their studies also showed, however, that the ambitious faculty continued to complain as loudly about the quality of their students and to fail the more highly selected groups in the same proportion as they had previously failed the less highly selected students!

In addition to knowing how to identify, by means of tests, students with high abstract verbal ability, personnel workers in this type of institution may need to know how to attract the interest of a sufficiently large number of high-school students so that only a selected fraction of them will be enough to fill the institution. And so knowledge and skills in recruitment may also be desired in personnel workers if they are to meet the main requirement of providing the rationalists with the "skim they love to teach."

In this type of institution there is ordinarily no objection if the personnel workers undertake to help students learn how to read faster and with more comprehension. Furthermore, the faculty often welcome the expert help of the personnel workers in developing examinations that objectively measure the students' abilities to reflect upon, analyze, and manipulate ideas in the various fields or areas of subject matter. There is also evidence that such institutions are willing to maintain personnel workers to discipline, restrain, or remove any students who may cause ripples in the academic serenity that is so necessary to the study of universal truths and values.

Except for these contributions, this type of college has little use for personnel work. Personnel workers often are viewed by the rationalists as clever technicians, but of distinctly lower caste than those academic elite who work directly with the universal truths and values that are at the heart of the educational enterprise.

PERSONNEL WORK AND NEO-HUMANISM

It is in colleges and universities based on a neo-humanist philosophy, as Taylor describes it, that personnel work has come into its own in the past thirty years. The neo-humanist assumes a duality of mind and body. His primary concern, like the rationalist's, is with the cultivation of the mind, but he is humane in his recognition of the physical and social needs of the students whose minds he would educate. Although the neo-humanist may not see it as his personal responsibility to provide for the physical and social needs — or even, sometimes, the spiritual needs — of students, his philosophy of dualism permits, or even requires that within the total educational framework such provision should be made.

In recognizing both mind and body, reason and emotion, thought and experience, he also recognizes both class and extraclass activities. By designating class activities as a special domain belonging to the faculty who will therein conduct a program having to do with the cultivation of intelligence, he has at the same time left the great out-of-class domain to student personnel workers.

In 1929, Lloyd-Jones³ proposed the concept of separate domains. Cowley⁴ advanced this idea in several statements, maintaining that the goals of education would be advanced by such a jurisdictional division. And so it has been in what they have conceived as their own domain that student personnel workers in the past three decades have erected elaborate, extensive programs somewhat independent of and apart from the curriculum and the instructional programs.

Launching itself in the 1920's with the propulsive energy of the scientific measurement and vocational guidance movements,⁵ "student personnel work" as it began to be called in the 1920's was soon joined to the older, broader, and less dramatic programs of services⁶ that had been developing for several decades in most American coeducational

³ Esther Lloyd-Jones, *Student Personnel Work at Northwestern University*. New York: Harper & Bros., 1929.

⁴ W. H. Cowley, *The Personnel Bibliographical Index*, pp. 3-4, (Columbus, Ohio: Ohio State University, 1932); "The Strategy of Co-ordination," *Occupations*, XVI (May, 1938), 724-27; "The Nature of Student Personnel Work," *Educational Record*, XVII (April, 1936), 199-226.

⁵ W. H. Cowley in *Trends in Student Personnel Work*, pp. 12-27. Edited by E. G. Williamson. Minneapolis: University of Minnesota Press, 1949.

⁶ Lois K. Matthews, *Dean of Women*. Boston: Houghton Mifflin Co., 1915.

colleges almost exclusively under the sponsorship of deans of women.⁷

By 1937 the student personnel movement was ready, under the auspices of the American Council on Education, to set forth its claims and contentions.

This philosophy implies that in addition to instruction and business management adapted to the needs of the individual student, an effective educational program includes—in one form or another—the following services adapted to the specific aims and objectives of each college and university:

1. Interpreting institutional objectives and opportunities to prospective students and their parents and to workers in secondary schools.

2. Selecting and admitting students, in co-operation with secondary schools.

3. Orienting the student to his educational environment.

4. Providing a diagnostic service to help the student discover his abilities, aptitudes, and objectives.

5. Assisting the student throughout his college residence to determine upon his courses of instruction in light of his past achievements, vocational and personal interests, and diagnostic findings.

6. Enlisting the active co-operation of the family of the student in the interest of his educational accomplishment.

7. Assisting the student to reach his maximum effectiveness through clarification of his purposes, improvement of study methods, speech habits, personal appearance, manners, etc., and through progression in religious, emotional, social development, and other nonacademic personal and group relationships.

8. Assisting the student to clarify his occupational aims and his educational plans in relation to them.

9. Determining the physical and mental health status of the student, providing appropriate remedial health measures, supervising the health of students, and controlling environmental health factors.

10. Providing and supervising an adequate housing program for students.

11. Providing and supervising an adequate food service for students.

12. Supervising, evaluating, and developing the extracurricular activities of students.

13. Supervising, evaluating, and developing the social life and interests of students.

14. Supervising, evaluating, and developing the religious life and interests of students.

⁷ Esther Lloyd-Jones in *Trends in Student Personnel Work*, pp. 260-64. Edited by E. G. Williamson. Minneapolis: University of Minnesota Press, 1949; W. H. Cowley, "History and Philosophy of Student Personnel Work," *Journal of the National Association of Deans of Women*, III (June, 1940), 153-62.

15. Assembling and making available information to be used in improvement of instruction and in making the curriculum more flexible.
16. Co-ordinating the financial aid and part-time employment of students, and assisting the student who needs it to obtain such help.
17. Keeping a cumulative record of information about the student and making it available to the proper persons.
18. Administering student discipline to the end that the individual will be strengthened, and the welfare of the group preserved.
19. Maintaining student group morale by evaluating, understanding, and developing student mores.
20. Assisting the student to find appropriate employment when he leaves the institution.
21. Articulating college and vocational experience.
22. Keeping the student continuously and adequately informed of the educational opportunities and services available to him.
23. Carrying on studies designed to evaluate and improve these functions and services.⁸

How vastly extended is personnel work in institutions dominated by neo-humanists beyond the scope of such work in institutions dominated by the rationalists!

Even by the enumeration of these twenty-three functions, however, the field was not fully defined. Later, additional functions were added: "The proper induction, orientation, and counseling of students from abroad"; "Counseling for married students and for those contemplating marriage to prepare them for broadening family and social responsibilities"; and "Special attention . . . to the educational importance of supplementing the efforts of counseling specialists by the use of carefully selected, specially trained faculty members serving as advisers and counselors."⁹

In the 1920's and 1930's personnel work was presented as a way of reclaiming for education the personalistic and humanistic elements that had been destroyed by an impersonal, scientific, secular, and proliferating curriculum.¹⁰ Cowley even went so far as to invent a new word, "holoism," for the personnel movement to describe a quality to

⁸ *The Student Personnel Point of View*. American Council on Education Studies, Series I, Vol. I, No. 3. Washington: American Council on Education, 1937.

⁹ *The Student Personnel Point of View*. American Council on Education Studies, Series VI, Vol. XIII, No. 13. Washington: American Council on Education, 1949.

¹⁰ W. H. Cowley, "European Influences upon American Higher Education," *Educational Record*, XX (April, 1939), 165-90.

which he hoped personnel work would dedicate itself. This seems to have been an effort to embody in a new word, especially for the profession of personnel work, the conviction about which most modern psychologists agree, as pointed out by Corey in chapter iii, that an individual reacts in any situation as a total, integrated person.

Due to the fact, however, that personnel programs have expanded so fast and also, to some extent, to the fact that personnel work has been described characteristically by author after author and committee after committee as "a collection of services," the same fate has tended to overtake personnel work as earlier, it was claimed, had overtaken the curriculum: personnel programs in large institutions to a considerable extent have also tended to become impersonal, scientific, secular, and proliferative.

As services have been added one after another to round out and make more complete the student personnel programs that institutions have wanted to offer, more and more specialists have been added to develop and administer each of these services. The larger the institution and the more different personnel services it offers, the more specialists, and the more highly trained specialists, are wanted. Under these conditions it is not long before no one specialist can know or serve more than a part of the total student. Under these circumstances the idea of "holoism" becomes an empty one; the objective of each specialist cannot be service to the whole student, but rather the maintenance of an efficient service for that part of the student with which the expert's specialized training and specific assignment authorize him to deal.

This sort of development automatically brings about a further development — particularly in the larger institutions in which students have been parceled out among many specialized services: the services themselves must be organizationally related and administratively maintained in such relationship to each other that they understand their jurisdictions and operate efficiently, not only in and of themselves but also in relation to each other. This calls for a director, a co-ordinator of personnel services, sometimes miscalled a dean of students instead of a director of services, who is charged with the development and maintenance of an efficient operation of services.¹¹ Inherent in this development are the advantages and disadvantages of any machine operation. The parts must work together smoothly; one must not get in the way of the others; each must perform its own part efficiently. A master mind is needed which can encompass the whole operation

¹¹ *The Student Personnel Point of View* (1937), *op. cit.*, pp. 14-15.

and maintain the desired efficiency of the services. Domination and autocratic control, while not the only methods for accomplishing this efficiency, sometimes are thought to be necessary and justifiable to keep the program operating smoothly. Impersonality, scientific efficiency, and a neglect of the basic human values which personnel work should serve, may easily characterize this type of program.

An extension of this idea would propose realignments of the national organizations in the field of guidance and personnel work so that special functions and services become the basic units of a new "unified" movement.¹² Members, then, would enter the new national organization, or find status in it, in terms of their expertness to perform services as defined by the many specialized sections that would make it up. There might even be a section or division of those whose specialization is co-ordinating the functioning of the many other specialists.

The emphasis on subject matter, specialization, and proliferation that has caused so many problems in connection with the curriculum certainly has its counterpart in personnel work in the emphasis that has been placed on function, specialization, and proliferation. Less vocal as yet are those among personnel workers who are concerned that personnel workers should make a more fundamental contribution to the development of students as persons.

There are those, however, who are insisting that personnel work should consider persons and their development as of central importance, and techniques and patterns of organization as only peripheral. There are those who maintain that a system of specialized personnel services will always serve students best at points of special need and stress, but there are others who as staunchly maintain that personnel work is concerned with more than the problems of students at critical periods of their lives: it has to do fully as importantly with the continuous stimulating and aiding of the personal and social development of every student. Personal and social development occurs not only as a result of stimulation received through the curriculum but also as a result of skilful personal counseling. The "diagnostic service to help the student discover his abilities, aptitudes, and objectives" and the assistance personnel workers give the student throughout "to determine upon his course of instruction in light of his past achievements, vocational and personal interests, and diagnostic findings" are valuable adjuncts in the minds of many educators in bringing about a relation between a student and the curriculum offering of the college — a relationship that takes account of individual differences and gives

¹² D. D. Feder, "Next Steps in the Personnel Profession," *Occupations*, XXVII (October, 1948), 5-10.

the best possible opportunity for students to feel motivated to learn. Counseling has been stressed increasingly by many educational committees and individual writers as essential to an educational philosophy that is concerned about unity, individual differences, and motivation. There is less unanimity as to who should do this counseling: Shall it be only experts who have been professionally trained to counsel; every teacher a counselor; or by three levels of counselors (the academic adviser, the administrator-counselor, and the fully trained clinical psychologist holding the doctoral degree), carefully delimited as to their counseling functions and responsibilities, as suggested by Hahn and MacLean?¹³

While counseling has received much recognition for the valuable and unique contribution it can make to general education, there is as yet but little effective recognition given to ways (other than through the classroom and counseling) by which personal and social development is stimulated. A few writers are calling attention to the possibility that personal and social development may be enhanced even more as a result of a complex interaction of social roles and impacts — particularly in late adolescence, in relations with one's peers. This point of view definitely lifts personnel work out of the clinic, out of the service bureaus of one sort or another. It necessitates drawing as heavily on sociology as psychology; as much on group dynamics as on counseling. This growing concept of personnel work demands that the organization to facilitate personnel work be viewed as a way of relating services efficiently to each other and to the problems of students and more from a standpoint of what the organization itself can demonstrate in terms of human relations and how it can serve most effectively to help students progress in their social learnings and adjustments.

Even in the dualistic system that is neo-humanism, personnel workers have gone far enough to see that the interaction of the personality qualities of individuals and the characteristics of group structure and processes need much more theoretical and experimental attention. The implications of growing knowledge in this field are being explored not only for their educational significance but also for their possible broad social consequences.¹⁴

At least some personnel workers, in the wide opportunities afforded

¹³ Milton E. Hahn and Malcolm S. MacLean, *General Clinical Counseling*. New York: McGraw-Hill Book Co., 1950.

¹⁴ Esther Lloyd-Jones and Janet A. Kelley, "Social Development and Group Morale," *Encyclopedia of Educational Research*, pp. 1339-45. New York: Macmillan Co., 1950.

them in neo-humanistic institutions, have recognized the inseparability of thinking, behaving, and feeling, and have been concerned not only with the intellectual aspects of learning and growth, nor only with the maintenance of a system of special services, but also with how the total situation can best contribute continuously to the all-round development of each student.

No one would deny the need and value in personnel work for specialists in the various areas (testing, vocational guidance, housing, for example). There is need also in the curriculum for specialists in subject-matter fields. But there is important need in the field of personnel work for the general practitioner who conceives of himself primarily as an educator in the broadest sense; who has concern for the development of students as whole persons; who has knowledge and skills both in counseling and in the many aspects of group relations; who understands the importance and difficulties of developing democratic organization and processes in the administration both of the personnel program and of the other aspects of the educational program; and who is interested in improving the interactions of curriculum and personnel program as interrelated components of the student's total educational experience.

PERSONNEL WORK AND INSTRUMENTALISM

It is in institutions where the instrumentalist philosophy is predominant that personnel workers and teachers have an opportunity to work most closely in collaboration for the integrated development of every student in thinking, feeling, and behavior.

It may to some extent be in consequence of bigness that specialization, division of labor, and proliferation tend to develop. Certainly, in industry, specialization, division of labor, and the assembly line are correlated with mass production. A study of authors and ideas in the area of personnel work during the past fifteen years shows that most of the influential books and pamphlets have been concerned with offering personnel services to students on a scale and in terms of patterns most appropriate to the large university. In the same way that mass production, high specialization, division of labor, technical expertness, and the assembly line hold a fascination for the American mind when it contemplates industrial production, just so, similar solutions, developed to deal with bigness in the few gigantic educational institutions, have held an impelling fascination for personnel workers in the small college.

Although American ingenuity has unquestionably turned principles of mass production in the field of industry to our material ad-

vantage, it may very well be that we shall have to rediscover the possibilities of the smaller units in education before we can fully realize the fruits that collaboration in human relations can bring. For some decades it was believed that large institutions could be developed for orphaned children that would, inexpensively, provide the children with a generous variety of expert services. However, those less concerned with the maintenance of expert services than they were with the best development of the children eventually became convinced that the children developed in all ways better in even mediocre families than they did with all the advantages that well-run institutions could provide. The same idea is leading many social agencies to seek placement for aging men and women in families instead of setting up institutions for them to live in, and it is encouraging families to care for their convalescent or chronically ill members at home where it has been discovered that they do better, rather than to leave them in hospitals where expert services are at their bedsides.

It may also be, in the field of education, that the idea of "services to the student" is leading us away from the idea of how best to help the student grow. It may be that we become so interested in serving the student effectively that we are in danger of forgetting that he will develop best as he learns through interacting intellectually, socially, emotionally, and physically in a rich variety of interrelated experiences. A group in the Fifth National Conference on Higher Education¹⁵ gave attention to "The Student as a Factor in His Own Education." The instrumentalist philosophy, as described by Taylor (chap. ii), would develop an educational program in which the student is taught the ideas and methods of co-operative social action toward ends which he helps to determine. He would "learn these values both by the knowledge he is given, and the emotional and social character of the community in which he is educated. . . . The intention of the new program is not simply to sharpen the reasoning powers of the student, or to increase the powers by which he can serve his own particular ends, but to make him an active element in the creative change of the society around him."

How, concretely, can the personnel worker contribute to this kind of education? First, by his knowledge of individual psychology — of the nature of learning, motivation, emotional needs, and mental hygiene. Second, by his knowledge of group behavior, of folkways, mores, social patterns, and group development. These knowledges the trained

¹⁵ Robert A. Johns (Recorder), *Current Issues in Higher Education*, pp. 56-60. Washington: National Education Association, 1950.

personnel worker can share as faculty and students plan together, then evaluate and replan the emotional and social character of the college community in which they live and learn.

Third, he can, by his counseling with both students and faculty, help them as individuals discover and manage more competently both their strengths and weaknesses. Perhaps, even more importantly, he will consult with faculty and student counselors who wish to learn better to understand others and to contribute to the more effective management by those others of their own strengths and weaknesses.

Fourth, he can, it is hoped, by his own relations with other people demonstrate and teach, by his example, qualities of human relations which are characteristic of healthy emotional adjustment and basic to a "good" society: self respect; respect for others; the ability to co-operate; the will to work *with* others (not to dominate, not to be subservient to, not to withdraw from, nor to be overly solicitous and protective of others).

Fifth, by his professional knowledge of group development and group dynamics, he can contribute in many ways to helping students work together productively and can help them learn about themselves and the nature and problems of human relations as the students define and develop group projects. Because of his professional training in the principles and skills of group work, he can contribute to the more effective development of faculty groups and faculty-student groups. Recognizing that effective administration has importantly to do with human relations and the development and maintenance of morale, he should be able to co-operate with the college administrators in helping them develop methods and evolve objectives that will facilitate the more effective and responsible functioning of everyone in the institution.

Sixth, if he is a personnel worker who also carries a certain amount of both teaching and administrative responsibility (as surveys reveal so many now do) he can, as a teacher, co-operate with the other teachers in discovering how teaching method can be further and further improved so that student learning is continuously enhanced.

Seventh, since the well-prepared personnel worker has a social philosophy and a philosophy of education, and since he knows something about the various types of curriculums and their development, he is quite able to co-operate with curriculum specialists and with the other educators and students in the evolution, modification, and evaluation of curriculum programs.

Eighth, because the wise personnel worker recognizes the dangers

of building a program too exclusively on principles of expertness and paternalism — centered on services *to* students — he will adopt as a cardinal principle working co-operatively *with* faculty and students on recognizing, defining, and solving problems of personal and group living.

And ninth, because the personnel worker ought, above all else, to be trained to remember that the end of education is man and not knowledge per se, or programs, or institutions, or methods, or systems, the personnel worker can help in evaluating educational efforts to keep the criteria oriented always to the development of real persons.

In these ways can personnel work contribute to education of the type the instrumentalist would develop. As suggested above, however, it may be desirable or even necessary for the realization of this type of education that the unit group be not too large. It may be that colleges of less than 1,000 must be thought of as the situations in which the values of this way can best be explored. It may be that only in institutions of "encompassable" size can human beings interact in readily observable patterns of relationships which, through their study and guidance, can produce rich educational harvests.

More than half of all the colleges and universities in this country fall well within the desirable limits of size. And, furthermore, some thoughtful personnel workers and other educators in universities of vast size have begun to explore the possibilities of making smaller groups — particularly "Schools" or "Houses"¹⁶ — the essential unit in the personnel program. They would make personnel work an integral part of the central educational process in place of the campus-wide network of personnel services which is the pattern that now occupies such a prominent place in the neo-humanist view.

In the instrumentalist program personnel workers, teachers, and students can unite whole-heartedly in their commitment to experimentation and the scientific method; in skepticism of authoritarianism; in their belief in curriculum flexibility and provision for multiple differences among students in respect to many variables; in stressing the present needs and interests of students; in devoting attention to the social problems that characterize our modern life; in concern for the all-round development of students and an unwillingness to concentrate exclusively upon intellectual development or education by reading and listening; in insistence on the maximum education for all; in helping each student fulfil himself by learning through practice to give part

¹⁶ See, for example, the Bender Report in the *Harvard Alumni Bulletins* for November 9, 1950, and December 9, 1950.

of himself to the others with whom he lives and works; in helping students learn the ideas and methods of co-operative social action toward ends which he helps to determine; and, furthermore, to learn these values both by the knowledge derived from his studies and from the emotional and social character of the college community in which he is educated.

PERSONNEL WORK CAN INFLUENCE INSTITUTIONAL PROGRAMS

At the beginning of this paper it was stated that personnel work finds its foci, its scope, and its limitations in terms of the institutional program of which it is a part. A personnel program, however, is not utterly at the mercy of the philosophy of education that prevails in the college in which it functions. A strong personnel program can influence as well as be influenced by the curriculum and the total educational program.

The primary problem, of course, in determining whether personnel work will influence and improve education, lies in the question of whether personnel workers themselves are content with the *status quo* or whether they believe education can be further improved. It is not easy for personnel workers, who have been taught the formula that personnel work consists of providing a certain collection of services to students, to revise their thinking, their roles, and their programs in terms of the philosophical, sociological, and psychological issues discussed in the early chapters of this volume. A few personnel workers themselves hold a rationalistic philosophy of education and are not only content but proud to serve in limited but valuable ways the purposes of this type of education. A great many personnel workers are so entrapped by organization, budgets, and the sense of freedom that they enjoy in neo-humanistic institutions that they will resist to the bitter end moving away from a situation that seems to offer them so much. And there is no doubt but that the services developed by personnel workers of this school of thought have contributed valuably to the continued personalization of education, to improved motivation on the part of students, and to greater integration in some ways. Counseling, in particular, is one of the personnel services that has made a valuable contribution to these ends.

There are, however, many creative educators among personnel workers who believe that they can, through their special skills and interests, make some fundamental contributions at the point of educational purposes and methods in the situations in which they work. The following examples show how a few of these personnel workers are

serving as "change agents" to move those situations toward characteristics described elsewhere in this volume as virtues of general education.

In University A both the curriculum and the personnel program formerly sidestepped problems the students met in their living. The curriculum was focussed on teaching systematic theories of political science, social philosophies, psychology of individual differences, etc., but did not attempt to develop connections between theoretical study and current problems confronting the students. The personnel workers, on the other hand, have focussed squarely on students' personal problems, such as their desire to develop some form of student participation in the control and direction of their own group life, and have worked with students on the interracial tensions and dissensions that have been increasing in scope and intensity. They have helped students define, analyze, deal with, evaluate, and redefine the problems they meet in their daily lives. Fortunately, several of the personnel workers have faculty status and so have been able to present in faculty meetings vivid descriptions of these concrete student problems, inviting faculty discussion of the processes under way. An exchange is now developing whereby personnel workers are being invited by certain faculty members to participate in their courses, and more faculty members are being involved as consultants in relation to the problems and interests of students that arise outside of the classroom.

In College B a faculty committee on failing students tried for several years to meet the demands of the faculty by "fiddling around" with the exact proportions of unsatisfactory course work that would spring the trap, letting students out of college. A competent personnel worker who was appointed to the committee first convinced the committee of desirable modifications in this approach and then, with the help of the committee, began to interest the whole faculty in the complexities of the problem of who should be educated, how they should be educated according to their individual differences, and why failure occurs.

In University C the faculty strove to give better and more brilliant lectures, leaving it to counselors in the personnel office to keep *au courant* with students' interests and concerns, to understand individual students, and to discuss and counsel with them. But personnel workers, as a result of a program in the residence halls that has led students to define problems of concern to them, now encourage students to invite selected faculty members to meet with them in their residence halls for discussion meetings about these problems. These meetings are

quite different, in terms of faculty role, student participation, and methods used, from the formal classes which have been the style in that university and seem to be raising questions in the minds of some of the professors not only concerning basic issues of effective teaching and learning but also of student-faculty relations.

In College D, where a new president was disturbed about a suicide and several long-unrecognized problems of mental illness among the students, a personnel officer was encouraged to constitute *ad hoc* groups of faculty, residence counselors, physician, psychiatrist — and even an interested member of the Board of Trustees — to study together and, with the help of consultants, to try to learn how such tragedies might be avoided.

A personnel worker, appointed to the staff of a Central Counseling Bureau in College E, obtained permission to spend only half of his time counseling students. In the other half of his day he met weekly or biweekly, as they chose, with ten groups of faculty members. These ten groups, comprising about one hundred faculty members, had developed from a letter sent to two hundred faculty members inviting them to meet with him at their convenience as often as they wished and for as long as they found it profitable, to discuss together problems met in their contacts with students. At last report, seventy-five of the original one hundred were well on into their eighth month of discussion together about problems of counseling and group process met with in their work. Each group had developed its own distinctive program, but all the groups were using the personnel worker as a resource person to supply them with factual information and as a provocateur to stimulate their thinking.

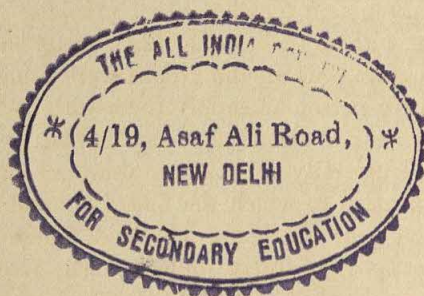
University F is undertaking an experimental program in general education to which the first five hundred of the Freshmen who apply each year are being admitted. These five hundred are divided into "sections" of thirty students each. Each section has a team consisting of an English instructor, a social-science instructor, and a personnel worker; the work of the students in a section with this team forms the core of the student's Freshman program. Each student, in addition to his core, carries additional courses. The personnel worker is assigned to help the other two members of the team learn the needs of the students. The three staff members, in addition to meeting the section for two hours three times a week, also meet together each week to study students, to evaluate their work together, and to plan subsequent work with the section. Each student has an hour's conference with one of the team members at least once a month. The personnel worker sup-

plies such data relating to students as he can gather together, discusses each student with his team-mates, supplements their counseling, and helps students relate themselves to interesting on- and off-campus activities.

CONCLUSION

Although Cowley contends that the personnel workers, as represented by those in the medieval university who maintained custodial care for the welfare of students, are the most venerable of all our present-day academic officers,¹⁷ personnel work has not yet, by far, exhausted the contribution that it can make to education. When personnel work has explored the applications of psychology and counseling to the field of education, it turns to the social sciences and group dynamics as offering infinite new possibilities of educational rewards. As education vigorously continues to seek answers to its many problems, personnel work will as vigorously continue to contribute by its own growth and through co-operative activity to the opening up of new vistas on the educational horizon.

¹⁷ W. H. Cowley, "History and Philosophy of Student Personnel Work," *op. cit.*



CHAPTER XI

THE EXTRACURRICULUM AND GENERAL EDUCATION

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BASIC OBJECTIVE OF THE EXTRACURRICULUM

A Point of View

In the second chapter of this volume, Taylor contends that "the individual is educated by the way he spends his time and the situations into which he is put, or into which he accidentally falls." If this is true, then it follows that the individual is experiencing personal development during all hours and through all activities of his days. We are, therefore, justified in appraising the contributions to education of out-of-class experiences as well as those that take place within the formal classroom. We believe that the unity of education, viewed as personal development, takes place within the individual, but its nature or content differs in a variety of different social contexts. Thus it is that in the present chapter we center attention on out-of-class learning without implying a sharp break in continuity from the classroom curriculum. Indeed, in the extracurriculum we stress the unity of direct developmental experiences in contrast to the classroom situation involving the removal of the student from the social climate of his direct experiences for the purpose of learning principles and generalizations about human affairs. It is our contention that some kinds of learning, especially human relationships and values, take place in the direct experiences of human beings rather than in abstracted and artificial situations. Some of these learnings, being relatively simple in their directness, may serve as important foundations for the later and more elaborate adult attitudes and value systems of an individual. In this sense the extracurriculum may be organized and used to serve strategically important educational ends.

Thus, we begin our discussion with emphasis on the point that the

purpose of the extracurriculum, as viewed by general education, is its contribution to the personal development of student participants. The developing personality, intellect as well as behavior, is the basic objective to be achieved through the extracurriculum. Naftalin, in contrast, seems to restrict the function of the social sciences in general education to intellectual development, not to the behavior resulting from classroom learning. For example:

When the focus of instruction is shifted from the subject matter to the student, when the outcome of education is evaluated not in terms of what the student learns about given situations but how he behaves with respect to them, the social scientist—as is true of any educator for that matter—assumes the responsibility for communicating attitudes and conditioning preferences, which, in the ultimate analysis, may not be related to intellectual development at all (p. 120).

This narrowing of human development, or at least the school's task in furthering it, to intellectual things has often made of classroom learning an experience divorced from the "real," off-duty life of students. In contrast, in the extracurriculum, as we shall stress repeatedly throughout this discussion, we are trying to capture the "naturalness" of voluntary and self-motivated activities and to use it to energize the learning of more than superficial social behavior and skills. But this we cannot do if classroom learning is segregated in emphasis from behavior and from the social reality faced by the student. We wish to help the student use all aspects of his individuality, not merely his intellect, in achieving control of himself and his environment. This, we believe, can be done best, with respect to certain kinds of learning we shall analyze later, *not* solely through his withdrawal to the classroom or library to learn guiding principles and generalizations from the pasts of other persons but also by utilizing the life experiences at hand, under the mentorship of teachers, to formulate his own generalizations and to submit them to the test of verification of direct experience as well as to comparison of thinkers of the past. It seems to us that such a point of view, whatever its technical, pedagogical validity may prove to be, does provide a possible way of adding zest and useful meaning to that part of life which otherwise will sometimes continue outside of the formal classroom to be a distracting and competing attraction to students. Moreover, learning will take place in an integrated manner with the individual's guiding principles both emerging from and serving to direct and control his daily behavior.

Types of Extracurriculum Activity

Out-of-class activities and experiences may influence the develop-

ment of students in many ways. The term *extracurriculum*¹ will be used in this discussion to cover these organized and informal activities and programs conducted by or for students in the school, the college, or the adjacent community. Not all activities may prove to possess educational usefulness. But the following four types will illustrate the content of extracurricular activities which seem to us to have possible usefulness in general education:

1. Community and school programs in graphic arts, music, and dramatics may add to the student's aesthetic maturity.
2. Participation in, and even observation of, athletic contests and outdoor sports may maintain morale through relaxation and enjoyment.
3. Special lectures and debates on current social, political, and economic problems may deepen understanding in preparation for citizenship participation in government through elections and other societal processes.
4. Active membership in one or more of the many and varied clubs and organizations may bring maturity of interpersonal relationship through group enterprises.

Limiting Factors

These four types of extracurriculum activity would seem to possess much that is or can be made significant in general education of the kind Taylor calls "instrumental." But we should temper our expectations by emphasis on three important limitations: (a) Few critical or experimental studies of the effects or products of the extracurriculum are available to buttress expectation with fact. (b) Relatively few students in any school or college participate in activities, except in schools that require participation,² and, therefore, relatively few are able to profit from whatever educational values may be inherent in the extracurriculum. (c) The extracurriculum, like the school itself,

¹Some writers prefer the term *co-curricular* to denote an equality of importance of those two places in which learning occurs. Other writers prefer the term *extraclass*. See Ellsworth Tompkins, *Extraclass Activities for All Pupils*. Federal Security Agency, Office of Education. Washington: Government Printing Office, 1950.

²Chapin and Mehus reported in 1924-25 that 51.7 per cent of Freshmen men did not take part in any campus activities; 33.9 per cent of Sophomore men, 26.1 per cent of Junior men, and 23.4 per cent of Senior men did not participate. The corresponding percentages for women are: 43.3; 21.2; 25.3; 23.4. The percentages of nonparticipating students in off-campus activities in the community are even larger. F. Stuart Chapin and O. Myking Mehus, *Extra-Curricular Activities at the University of Minnesota*, pp. 39-43. Minneapolis: University of Minnesota Press, 1929. Brown reported similar results in a later study in the same institution. See Clara Brown, "A Social Activities Survey," *Journal of Higher Education*, VIII (May, 1937), 257-64.

does not appear to be democratically organized with respect to equality of opportunity for the participation of students of all economic classes, or all racial and religious backgrounds. The first two points have already been illustrated, but our third point needs elaboration. In chapter iv, Havighurst has discussed some of the social and economic factors related to the class structure of student populations. Students in high school or college are not only of higher average intelligence than those adolescents not in attendance but they also come in greater numbers and proportions from the higher socioeconomic classes of parents. Two studies indicate that the extracurriculum is similarly organized along class-structure lines. Corey found a higher participation on the part of children of professional men, proprietors, clerks, and salesmen than was the case for children of skilled, semiskilled, and unskilled laborers.³ And the Muellers reported that sorority members at Indiana University come preponderantly from the families in the higher economic and occupational classes and that the members also occupy a disproportionate share of extracurricular offices.⁴ Our present discussion of the possible contributions to general education from the extracurriculum will be colored by these three limitations.

Relevant Content of Activities

We shall center much of our discussion on the organized-club type of activities rather than upon the informal, solitary, and unorganized phases.⁵ We may further sharpen our discussion by citing a number of organized activities widely found in the programs of students' clubs. The following nine types of programs would seem to offer experiences that, from the point of view of an instrumentalist, could be significant for students in general education.

(1) Professional programs are important aspects of students' ac-

³ F. Byron Corey, "Whose Children Profit Most from Extracurricular Activities?" *Nations Schools*, XXV (January, 1940), 53-54.

⁴ Kate Hevner Mueller and John H. Mueller, "Socioeconomic Backgrounds of Women Students at Indiana University," *Educational and Psychological Measurement*, IX (Autumn, 1949), 321-29.

⁵ Chapin and Mehus, *op. cit.*; Grace Longwell Coyle, *Group Experience and Democratic Values* (New York: Woman's Press, 1948); Harold Hand, *Campus Activities* (New York: McGraw-Hill Book Co., 1938); Janet Agnes Kelley, *College Life and the Mores* (New York: Bureau of Publications, Teachers College, Columbia University, 1948); Gordon Klopff, "Planning Student Activities in the High School" (Madison, Wisconsin: Wisconsin High School Forensic Association, 1950 [mimeographed]); Henry D. Sheldon, *Student Life and Customs* (New York: D. Appleton & Co., 1901); and Ruth Strang, *Group Activities in College and Secondary School* (New York: Harper & Bros., 1941).

tivities. That is, while the extracurriculum is a part of general education, it also has usefulness for professional training. In this latter respect the extracurriculum is an auxiliary curriculum with definite values for the professional training of students. For example, journalistic activities on school papers, yearbooks, and magazines offer rich experiences in noncredit professional apprenticeships; and engineering-club programs of lectures offer important orientation experience through professional association with adult practitioners.⁶

(2) Recreational and leisure activities offer a wide range of sports and organized entertainment limited only by the tendency of students to conform to the current fad in such things as popular tunes and dance steps.

(3) Religious programs and clubs are sponsored by community churches and by the Young Men's Christian Association and the Young Women's Christian Association. These organizations function in both high schools and colleges and offer rich programs for moral and social learning through student-managed activities and programs.

(4) Political and social-action clubs are used as means for the expression of convictions. Unfortunately, from a social point of view, most students either have no convictions to express or lack skill and poise in expressing them through these activities. Thus it is that only a small number learn to use these organized means to later participation in adult civic and political affairs, and in a number of colleges restrictions surround students' academic freedom to explore some controversial issues.⁷

(5) Student-government councils provide programs and responsibilities which center learning efforts on student-managed affairs conducted in behalf of and for all students.⁸

(6) Learning to live with others in the social melting pot of a

⁶ Donald S. Bridgman, "Success in College and Business," *Journal of Engineering Education* XX (June, 1930), 915-37; Chapin and Mehus, *op. cit.*; Frederick J. Kelly, *The American Arts College*, chap. vii (New York: Macmillan Co., 1925); and Charles Robert Pace, *They Went to College*, chap. vii (Minneapolis: University of Minnesota Press, 1941).

⁷ Robert F. Ray in co-operation with Richard H. Plock, *Partisan Politics on the Campus* (Iowa City: Institute of Public Affairs, State University of Iowa, 1950); and E. G. Williamson, "Responsible Academic Freedom for Students," *School and Society*, LXXI (May 13, 1950), 289-91.

⁸ Ralph A. Dungan and Gordon Klopff (Revised by Richard G. Heggie), *Student Leadership and Government in Higher Education* (Madison, Wisconsin: United States National Students Association, 1949); and Harry Charles McKown, *The Student Council* (New York: McGraw-Hill Book Co., 1944).

dormitory or fraternity represents for many students their first intimate social experiences with strangers from diverse social, religious, and economic backgrounds. School and college residences may also offer basic preparation for the requirements of other types of adult interpersonal relationships in group enterprises.

(7) Cultural activities include special lectures, artist courses, recitals, and museum tours. Many students experience such high-level aesthetic experiences for the first time in school and college. In contrast with other extracurricular activities, these programs have definite values for the rationalist's program of general education. That is, these programs add directly to the transmission of knowledge of Western civilization and of other cultures. They are then more directly related to the formal classroom curriculum than are other types of extraclass activity.

(8) Informal and unorganized activities involve group discussion and visitations with friends and acquaintances. In such activities students are free to touch upon experiences that have most emotional meaning for them. It would seem that the cathartic benefits of such discussions probably exceed the gains in systematic learning and understanding. That is, the discussions are not so much directed to learning new ideas as to individual verbalizing of experiences and unanswered questions.

(9) Noncredit intramural sports programs are usually conducted as activities of organized clubs and residential units. They have morale-maintaining values as well as developmental and entertainment values for the participants. In these respects these activities fit into the instrumentalist's program of general education. But intercollegiate activities, having largely lost their early status as student-managed activities, should be evaluated by some yardstick other than Taylor's three philosophies of education.

THE IMPORTANCE OF THE SOCIAL CONTEXT OF ACTIVITIES IN PERSONALITY DEVELOPMENT

We turn now from a description of the program contents of activities to an analysis of the underlying philosophy. That philosophy of education is identified with, if not identical with, Taylor's instrumentalist conception of general education. That is, the content of the extracurriculum is determined by the nature of its social or group context as principally interpersonal experiences and relationships. Whatever its stated program objectives, it provides rich opportunities for participants to become intimately acquainted with other persons

and to learn how to enjoy them and how to work co-operatively with them on common enterprises. Thus, the content of these activities is primarily social as opposed to the formalistic learning of abstract, or concrete, knowledge through books and didactic lectures.⁹

The "collegiate way of living"¹⁰ embraces a concept of the extracurriculum as it developed in the residential boarding school and college of colonial America including intellectual content as well as personal and social relations. Unfortunately in nineteenth-century American education, for a variety of reasons, the intellectual emphasis of the classroom largely became divorced from the interpersonal content of the out-of-class experiences of students and instructors. And today, curriculum and extracurriculum seem to be working at cross purposes, or at least toward disparate objectives, except for the few schools and colleges which retain unity through carefully integrated residences, tutorial instruction, day school programs, and similar devices.

One may trace this concept of collegiate life back through English residential halls and colleges to the monastery and cathedral schools of the medieval period.¹¹ In these educational plants, the unity of learning was enforced by the circumscribed social context in which it took place. In like manner, in early American colleges and boarding schools, the extracurriculum was partly intellectual in content, especially in the dormitory disputations and discussions that followed upon classroom instruction. But in the latter part of the nineteenth century, organized journalistic, recreational, athletic, religious, and political clubs and programs multiplied rapidly in schools and colleges, and the nonresident students outnumbered those living in dormitories. Then the proliferation of these activities destroyed much of their earlier emphases and content and they became social sideshows of the classroom.

The trend continues today in accelerated form and the overwhelming number of students now live either with parents or in commercial rooming houses. While boarding schools, dormitories, fraternities, and sororities, to some extent, carry on the traditional collegiate way of

⁹ Janet Agnes Kelley, *op. cit.* See also: Esther Lloyd-Jones and Janet Agnes Kelley, Sec. xii, "Social Development and Group Morale," in Walter S. Monroe's *Encyclopedia of Educational Research*, pp. 1339-43. New York: Macmillan Co., 1950 (revised).

¹⁰ Quoted by Samuel Eliot Morison in *The Founding of Harvard College*, p. 252 (from Cotton Mather's *Magnalia*, Bk. iv, p. 126). Cambridge, Massachusetts: Harvard University Press, 1935.

¹¹ Henry D. Sheldon, *op. cit.*

life, in both residences and extracurricular activities, new ways must be developed for nonresidential students to gain the educational benefits of the extracurriculum.¹² The development of a new unity of education through a new synthesis of content and aims of curriculum and extracurriculum is a challenge to the ingenuity of modern educators.

But not all educators join in the search for such a synthesis. Those who hold a rationalist view of general education would assign the extracurriculum to the periphery of education as an unimportant and even a distracting sideshow which, unfortunately, cannot be eliminated from the educational scene. It is judged peripheral because it is emotional and social in context and content and not encyclopedic and intellectual. That is, it consists essentially of the social reality of human personalities interacting with each other in a social or group context. In its intellectual content it operates at a lower and simpler level of abstraction and conceptualization than is found in the classroom. But we shall point out later some possibilities of exploiting the extracurriculum for intellectual, perhaps even rationalist, learning. In spite of some nonintellectual aspects, much of the extracurriculum can be directed to the critical, and therefore intellectual, analysis of social and personal problems in terms of some of the moral and social principles discussed in the classroom.

It is evident that such a social emphasis is not to be dismissed lightly from contemporary democratic education. Dewey and Mayo, among other analysts of our civilization, have contended that learning the techniques and attitudes involved in interpersonal relationships is not peripheral to the tasks of living and participating in our complex industrial civilization.¹³ In fact Dewey contended that this was the central task to be solved in a civilization that has moved from the intimate neighborhood relationships of small communities to the impersonal relationships of a congested urban culture. We may state the

¹² E. G. Williamson and Lynn Draper, "Where Shall Students Live?" *Educational Record*, XXXII (January, 1951), 29-44.

¹³ John Dewey, "Democracy and America" in Whit Burnett (editor), *This Is My Best*, pp. 1099-1115 (New York: Dial Press, 1942); John Dewey, "The Eclipse of the Public," *The Public and Its Problems*, chap. iv (New York: Henry Holt & Co., 1927); Elton Mayo, *The Social Problems of an Industrial Civilization* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1945). Whitehead expressed a related point of view concerning "education on its intellectual side": "The students are alive, and the purpose of education is to stimulate and guide their self-development." A. N. Whitehead, *The Aims of Education and Other Essays*, p. v (New York: Macmillan Co., 1929).

proposition in this manner: If face-to-face community relations are basic in preparing for adult living, then students can be aided to learn a social philosophy as well as social techniques in the real community of the college. It is not merely the superficial techniques of human relations that may be learned in extracurriculum experiences, but rather the deep foundations of a democratically-oriented life.

Granted the central importance of such learnings, we must then face the crucial question of effective methods to achieve them. The instrumentalists would perhaps contend, as has Taylor in his many writings, that such skills and values are best learned through the immersion of adolescent students in a social context and through the direct experiencing of a variety of personalities.¹⁴ It is on the basis of this deduction that the extracurriculum is evaluated as an integral part of the total education program.

SPECIAL ASPECTS OF LEARNING IN THE EXTRACURRICULUM

In the light of these points about the social philosophy of education, we need to examine certain features of the extracurriculum which determine the extent to which it may be directed toward these integrated objectives of socialized and intellectual development.

In the first place, it is likely that the problems to which such extracurricular application of classroom discussion is made will be current societal and personal problems rather than historically completed topics and incidents. For instance, following a lecture in sociology or anthropology, students in their residences or meetings may turn to a discussion of the place of Negroes in the culture of the southern states, not as of the date 1860, but rather the place of a Negro student in *this* school or college today and, more specifically, the explicit membership-exclusion clauses in the national constitutions of social fraternities. Again, in their lecture activities, students may turn to the topic of human rights, not the United Nations' declaration on human rights, but rather the action of the Regents of the University of Washington in discharging three professors for their communistic views and actions. These same students may debate, with vigor, not the generalized issues

¹⁴The following articles by Taylor illustrate this point of view: "The Student as a Responsible Person," *Harvard Educational Review*, XIX (Spring, 1949), 67-79; "Education as Experiment," *Antioch Review* (Yellow Springs, Ohio), (Summer, 1949), 219-35; "Philosophy as Process," *Teachers College Record*, (March, 1949), 396-403; "The Uses of Education" (An address delivered at his inauguration as President of Sarah Lawrence College, 1945); "Human Nature and Education," *Educational and Psychological Measurement*, VIII (Autumn, 1948), Pt. II, 530-39.

as analyzed in Chafee's *Freedom of Speech*¹⁵ but rather the "right" of the Young Progressives of America to collect signatures, after June 26, 1950, on the campus of a university, for the Stockholm Peace Petition.

Thus it is that learning in the extracurriculum often is highly motivated, as Corey (chap. iii) describes the process in other types of learning, by a clear perception of the means to the elimination of the student's dissatisfaction with a problem, issue, or situation immediately at hand in his social context. Parenthetically, an experimental study of this particular learning phenomenon might add to our knowledge of how to increase motivated learning in the classroom.

Secondly, we must emphasize that the sometimes-impulsive but genuine enthusiasm of students which leads them to grasp problems and issues at hand needs the seasoning of historical perspective afforded by the systematic and exhaustive analysis so characteristic of the classroom. The principal problem, educationally speaking, is to find ways of harnessing these two forces into a new working team that does for today's students what colonial residences sometimes provided for residential students of an earlier day in America. In passing, we must note realistically that students' extracurricular activities in past centuries have not always been seriously intellectual; witness the periodic destructive and disruptive riots so characteristic of the American residential colleges well into the latter part of the nineteenth century. Indeed, the history of the extracurriculum should lead us to temper our expectations of the possibilities of intellectual learning through extracurricular activities to the end that overexpectations may not produce lessened student interest and participation.

Thirdly, we observe the tendency of students to overgeneralize impulsively and idealistically in the extracurriculum some of the principles learned in the classroom. That is, they often extrapolate or overgeneralize a point of view or principle, often with a compulsive consistency, far beyond the intrinsic logic of the situation. For instance, some students may argue that if the brotherhood of men is a sound principle of human relations in America, then warfare must be abolished forthwith. And again, following classroom discussions of the political and economic causes of war, the widespread pacifists' movement of the early 1920's was a sincere attempt to avoid future wars by the immediate and universal adoption of a pledge to reject military service. Such intuitive leaps from premise to conclusion are breathtaking for a plodding, cautious, adult teacher.

¹⁵ Zechariah Chafee, *Freedom of Speech*. New York: Harcourt, Brace & Co., 1920.

A fourth peculiarity of the extracurriculum, which was referred to in our opening section, is the fact that not all students participate in activity programs. A number of pertinent questions come to mind. Can all students participate? Are all nonparticipants properly judged as nonnormal? Are all students ready and capable of voluntary and self-initiated participation? Should all students be permitted to choose their own type of participation? These and similar questions arise out of the basic paradox in the nature of human relationships in the extracurriculum: A completely voluntary system of social participation is congruent with the motivation of self-initiated effort and works well in the case of individuals who are psychologically ready to respond to their environmental opportunities. But such a voluntary system offers no aid, or too little aid, for many individuals who, while wishing to participate, are blocked by handicaps of personality, social shyness, physical awkwardness, race, religion, speech, peculiarities of physique, or other characteristics. Thus it is that the prevalent administrative method of organizing and providing facilities for activities is inadequate except for those students who are ready to use these facilities. The same weakness is found in the administrative device of requiring participation in an activity-hour scheduled a certain number of days each week. A third approach which provides trained teacher-advisers who serve as consultants to clubs and activities, has the advantage of raising the level of content of activities, but it does not serve those students who do not participate in organized activities. All of the above approaches need to be supplemented by a program of individualized counseling if the substantial numbers of nonparticipating students are to be assisted effectively to overcome those personal handicaps which stand as blocks between desire and realization of the desire to experience human relationships through the extracurriculum.

LEARNING FROM IMMEDIATE AND DIRECT EXPERIENCES

Having examined the content and social-philosophical objectives of the extracurriculum, our next step is to examine certain implicit assumptions regarding the psychology of learning in extraclass activities. The principal assumption is that students may acquire certain skills, values, and points of view through the unity of direct experience of social and human reality in and of itself rather than by systematized and didactic booklearning of abstract materials. In this sense the extracurriculum is comparable to the laboratory and the field-survey methods used in the formal curriculum. That is, in activities, students may, through direct participation, learn to live and work with persons

by experiencing them face to face, and not by means of secondhand descriptions or by the analyses of the generalizations and dicta of other observers. The content of the extracurriculum is, therefore, a direct learning experience of the facts, attitudes, skills, etc., to be learned and is not a secondhand verbal description and analysis of experience. That is, the content of the extracurriculum is interwoven with the method of learning in a unity of experiencing. We do not assume transference to real life from formalized learning but rather from the direct experience itself which provides the transference or generalization experience. Thus it is that in content and emphasis the extracurriculum is related to the Rousseau-Herbart-Froebel concept of human nature and its development. With a modification of such a concept in line with Dewey's emphasis upon the societal context of an individual's development, the current emphasis upon the interaction of culture and personality, as emphasized by Lewin and others, would seem to provide a frame of reference for studying learning processes in the extracurriculum. That is, the content of activities is often important chiefly because it facilitates the personal development of individual students; but it also has significance for at least one other general-education objective — namely, for achieving a democratically effective type of human relations. Thus, the curriculum may be appraised both from the phenomenological point of view, as Corey suggests in his chapter, and also from an outside observer's point of view with respect to predetermined educational objectives. Counselors and student personnel workers almost always take the phenomenological viewpoint as exemplified in this formulation of their dictum: "The objective of activities is the optimum growth of the individual student." According to this point of view, the end-goal is contained within the subject, the student's personal development as a human being. In contrast, lately more attention is given to the contextual reference of society necessary for the growth of individual members of a social democracy.¹⁶ This latter emphasis on the social context of personal development of each individual provides a possible bridge between activities and general education.

Such a point is made elsewhere by Taylor with reference to the

¹⁶ "The Student Personnel Point of View," American Council on Education Studies, Series VI, Vol. XIII, No. 13 (September, 1949); E. G. Williamson, "A Concept of Counseling," *Occupations*, XXIX (December, 1950), 182-89; Arlyn Marks, "The Personnel Point of View and the Administration of Extracurricular Activities in Nine Universities" (an Abstract of a Ph.D. thesis, University of Illinois, 1940). See especially the six criteria for appraising the administration of extracurricular activities in colleges and universities from the personnel point of view, pp. 8-10.

total educational curriculum, but it is especially cogent for our understanding of the learning process in the extracurriculum:

It is clear, I think, that values are learned, not always consciously, by the particular set of situations in which people spend most of their time, by the direct and indirect personal influence of parents, teachers, friends, and employers. I believe I could defend successfully the view that the value of things and ideas is learned only by the immersion of the individual in the stream of human relations which make up his daily life.¹⁷

To quote Taylor again: "The gap between the academic and the personal must be closed by the union of counseling with learning, learning with acting, and acting with knowing."¹⁸ The extracurriculum provides rich materials for research in determining effective means of bridging the gap between living and learning.

A third point is of importance in understanding the learning process found in activities. The extracurriculum is not usually formally and systematically organized as a program of educational experiences in the sense of Corey's use of the phrase, intentional learning. It consists rather in a number of casual, off-duty, volunteer, interest-directed, and private adolescent activities of seemingly little educational significance and often of explosive institutional public-relations consequences. To structure and organize these activities for educational purposes presents difficulties that are serious, although not insurmountable. We shall list some of these difficulties without discussion and elaboration.

DIFFICULTIES IN UTILIZING THE EXTRACURRICULUM FOR EDUCATIONAL OBJECTIVES

In the first place, to utilize the extracurriculum as a teaching device to achieve educational, as opposed to sheer recreational, enjoyment, we must rid ourselves of the dictum of the sanctity of students' complete and autonomous control of their own affairs.

Likewise, we must modify our belief in the false dichotomy of volunteer *versus* directed activities. Then we can forge a new, both-and combination of students' voluntary participation with the aid of adult consultants.

We need to modify the assumption that activities that have recreational and pleasure values for students are *ipso facto* unusable for the realization of educational objectives.

¹⁷ Harold Taylor, "Human Nature and Education," *op. cit.*, p. 531.

¹⁸ *Ibid.*, p. 537.

We should test the hypothesis that some types of desirable learning may take place even though only limited perception of a rational and conceptualized end-goal is clear to students. That is, a student may learn some generalizations about human relationships through the pleasurable experiences that such a social context produces as a matter of course in a dormitory-activity meeting. This type of learning may be a subtle by-product (incidental learning) and not intentional as in the case of the teacher-structured, systematic content of the classroom curriculum.

Finally, we shall need, as teachers, to substitute the techniques of group-work leadership for some of the traditional authoritarian roles of the classroom teacher.

Some Unique Features

We turn now to another important aspect of our topic, namely, some unique characteristics of the extracurriculum that determine its possible significance for general education. We should not think of the extracurriculum solely, or perhaps not chiefly, as another type of classroom adjunct to the formal curriculum. While it may offer auxiliary contributions to the formal curriculum, yet we may discover that it possesses its own distinctive educational objectives that should be incorporated into a broadened conception of the totality of learning. Such a broadened conception would have more appeal for the instrumentalists than for the rationalists. And the reason lies, as stated earlier in our discussion, in the principal emphasis in the extracurriculum upon the individual development of each student as a social being in contrast with the narrowed emphasis upon his intellectual development.

Among the significant unique characteristics of the extracurriculum are the following: •

The average student organization covers four to seven years of the student's life.¹⁹ Thus we see that we are not dealing with a part of the school that persists in structured form as long as does the classroom curriculum, a factor that may be turned to advantage concerning adaptability to changing interests and issues.

The extracurriculum is less systematic and extensive in its coverage of a topic, issue, problem, or project than is classroom instruction.

As indicated above, there is emphasis upon social learning, that is, upon using the program of activities as a means of learning necessary and effective

¹⁹ Ellsworth Tompkins, *op. cit.*, p. 9.

skills in working with other students at the immediate level of face-to-face relationships.²⁰

The level of students' abstractions and generalizations often does not develop beyond the issue, problem, or situation immediately at hand. That is, the heightened interest of the immediate experience makes wider generalizations and abstractions of principles more difficult, but not impossible, to achieve.

The extracurriculum is nearly always permeated with the adolescent's normal desire for recreation, entertainment, and enjoyment. For example, nearly all types of clubs, even those centered around political or economic issues and problems, organize dance parties as one of the important club activities. Adults usually do not thus integrate fun and thought.

Participation in the extracurriculum is voluntary and based upon the individual's desire for expression of his personal interests and preferences through out-of-classroom or noninstructional activities.²¹ Therefore, he reserves the privilege of severing his membership or discontinuing his participation whenever he thinks his interests have waned — without regard to the fact that the "course" may not have been completed. Such a contingent participation endangers continuity and stability of a program of activities. It also poses a question: Should the teacher-adviser carry the extracurricular program through to completion, as in the case of classroom instruction, despite a waning of student interest in the subject matter, or should the enterprise be abandoned as toys are cast aside when a child's attention and interest are distracted? The answer is to be found in the context of the activity — the school is a special kind of community dedicated to the use of activities for stimulation and development of students. Thus it is that activities are not inherently important as in some instances in adult communities. Nevertheless, learning to carry through with activity responsibilities, even after initial and sometimes superficial interests have waned, is a most important learning for the individual student. For this reason we shall need to adopt some of the social group worker's techniques in the instructional use of extracurricular programs for general-education objectives. Such adaptations, for the most part, remain in the planning stage of intention.

So highly interpersonal is the content of the extracurriculum that: (a) student leaders often become tribal and proprietary as opposed to community

²⁰ Chapin and Mehus, *op. cit.*, p. 15; Mayo, *op. cit.*, p. 22; and Pace, *op. cit.*, p. 74.

²¹ Galen Jones, *Extracurricular Activities in Relation to the Curriculum*. (New York: Teachers College, Columbia University, 1935). Also see Charles Boardman, Article VI "Administration," p. 1197, in Monroe's *Encyclopedia of Educational Research*. In 75 per cent of senior high schools surveyed, participation is voluntary, but 75 per cent of the junior high schools required participation in an activities class-period. With the exception of some instances of academic credit for band, chorus, and theater, participation in college activities is voluntary.

and school-trust minded; and (b) they sometimes select their leaders on the basis of popularity as the test of competence for an activity office. This characteristic of the extracurriculum appears to be an outgrowth of the emotionalized interpersonal relationship that develops from working together in a common group enterprise. Such a method of selection of leaders is not usually the equivalent of adult practices of patronage or a party spoils system; it is ordinarily a result of the fact that students have not yet learned to be objective in judging the competence of their friends for a given responsibility. In other words the extracurriculum may not in and of itself teach students effective methods of democratically selecting effective leaders. An adult adviser, trained in methods of using activities to achieve such learning, may be needed to aid students in effective use of the extracurriculum for such general-education objectives. Left to themselves, students may conclude that the demonstrated ability to get along amicably with others is a more highly prized aptitude than is skill in achieving the group's end-goals.

In so far as the complex of skills and attitudes learned through interpersonal relations in group activities is of significance in preparation for adult interpersonal and group membership responsibilities, the outcome of the extracurriculum is significant in a program of general education.

SOME IMPORTANT POSSIBLE RESULTS IN LEARNING

We turn now from our examination of certain relevant features of the extracurriculum to a review of some possible attitudes, skills, and other desirable behavior learned through the medium of activities. No experimental content-analysis has been made of the extracurriculum, but the following formulations are suggested as hypotheses to be verified by research.

Students may learn to participate in a democracy not so much through the winning of majority vote as through the adjustments by both majority and minority groups to each other's position. This is a most important type of learning in our kind of democracy in which changing balances must be achieved in order to reconcile self-interested demands of conflicting pressure groups.

Students need to perceive clearly and to accept emotionally the necessary relationships of individuals and of groups to the requirements of higher and broader authority.²² For example, the adolescent sometimes reveals hostility and resistance to the authority-status of adults, teachers, and parents. And some immature students seem to conceive their status in a democracy as that of an entirely free and independent agent. Perhaps the extracurriculum can be organized to aid them to accept and to accomplish desired results of an

²² Coyle, *op. cit.*, chap. viii.

activity within the framework of the authority-field-forces of the school or college. This would seem to be an important learning in the preparation of students for participating in an interdependent social democracy.

All students should acquire, with enthusiasm, respect for diversity in values, mores, beliefs, and behavior. But when left to their own preferences and desires, students tend to associate with like-minded friends and thus to reinforce their own restricted backgrounds. This type of social class-structuring of student life precludes the broadening of intimate experiences with students from other economic groups, geographic provinces, cultures, religions, races, and countries. But it may well be that the extracurriculum can be organized so as to balance both types of learning experiences, "tribal" and societal, in preparation for adult interclass, intercultural, and international sympathetic understanding.

The use of enjoyment of activities as the sole, or principal, criterion in selecting the content of the extracurriculum is too narrow a preparation for adult maturity. Many an adolescent tends to select his extraclassroom activities largely, if not wholly, in terms of the immediate and direct enjoyment they provide for him and thus to avoid participation in activities which offer no immediately interesting experiences. Such a pleasure-pain selection criterion is not adequate preparation for normal adulthood. The extracurriculum needs, therefore, to be organized in such a way as to redress the present imbalance of student life and to provide opportunity for experimenting with many other criteria for selecting personal activities.

Staff and teacher may serve both as technique consultants and as teacher-leaders of program content. The role of the teacher or staff as advisor to clubs is often a confused one. Some students, and teachers, think of them as experts to be consulted only with respect to the mechanics of programs. Others contend that the advisor can suggest content as well as techniques without destroying the effectiveness of learning by students through democratic self-government. More studies are needed to determine whether the extracurriculum may profitably be used for teaching students how to use experts with regard to both end-goals and the means to those goals. In our kind of an interdependent democracy such a learning of consultative habits would seem to be desirable preparation for effective adult citizenship.²³

Without destroying its organization and program, can students be aided so to organize and manage the extracurriculum as to use it as a means of learning how to identify effective leaders who will aid the group in achieving its group goals? Thorndike contended long ago that special training in judging the qualities of leaders was important in our democracy.²⁴ As indicated above, when left to their own predilections, student groups often select their leaders on the basis of face-to-face relations, a trait not always associated with

²³ Coyle, *ibid.*

²⁴ E. L. Thorndike, "Education for Initiative and Originality," *Teachers College Record*, XVII (November, 1916), 412.

competence to carry out group programs. Without destroying students' initiative, the extracurriculum may be used as a training program for all members in the effective selection of group leaders.

Intragroup wishes and opinions need to be widened to include external references about the group's choices, actions, and decisions. When left to themselves student groups seem to make group decisions largely in terms of the social and personal forces immediately present within the group, except in the case of administrative pressures and forces that may be imposed upon the group. Especially do student groups experience difficulties in perceiving the legitimate force of the wider public points of view, as in the case of discrimination against minority groups and in students' espousal of liberal and radical ideologies. The extracurriculum can be used profitably as a means of broadening students' perceptual fields beyond those personalities and social forces that are immediately at hand.

A somewhat allied point concerns the public context of activities. The general public often associates juvenility with the whole of student life, thus centering attention upon adolescents' disorderly recreational activities or explosive political activity. In order to avoid public censure of an educational institution, arising out of some kinds of student activity, educators may use methods of repressive control; they may disclaim any responsibility for the extracurriculum; or they may seek to use activities as a laboratory for students to learn how to apply methods of critical inquiry to emotionally charged social or moral conflicts. One such attempt has been reported in the case of the issue of discrimination against minority groups in the selection of members in college fraternities.²⁵

And next we ask a pertinent question: What is the nature of students' freedom in the choice of activities and in the expression of viewpoints? Do students have the identical privileges that citizens have in an adult community? Or does membership in an educational institution impose certain restrictions and responsibilities? These are questions that have been only initially analyzed and studied.²⁶ But whatever the answers to these questions, the more important aspects of the issue are found in the use of such questions in helping students learn complex matters of public policy and also learn methods of studying and dealing with conflicts of points of view.²⁷ Perhaps students can learn more about the meaning of freedom by analyzing both their own freedoms and the restrictions imposed upon them in the extracurriculum than they can learn by studying policies of academic freedom for teachers in

²⁵ E. G. Williamson and B. J. Borreson, "Learning To Resolve Social Conflicts," *Educational Record*, XXXI (January, 1950), 26-38.

²⁶ David D. Henry, "Public Attitudes on Academic Freedom, Politics, and Tenure," *Association of American Colleges Bulletin*, XXXVI (October, 1950), 351-60.

²⁷ Williamson and Borreson, "Learning To Resolve Social Conflicts," *op. cit.*; Williamson, "Responsible Academic Freedom for Students," *op. cit.*

the classroom. Such direct uses of the extracurriculum for learning ways of dealing with adult social problems would seem to be promising of effective results.

Finally we turn to a most important outcome of the extracurriculum. One of the marks of a liberally educated man may well be the kinds of civic projects he supports. The school and college have opportunities to assist all students to learn habits of charitable giving through student-managed projects to support foreign students in America and foreign students in their own universities, as well as such local community projects as the Red Cross, Christmas Seals, Conference of Christians and Jews, and other worth-while programs. The entire student body may be aided to organize year-round educational and financial campaigns that will benefit more than the handful of students easily available for solicitation in dormitories and fraternities.²⁸

Are Learnings Generalized or Transferred?

In our discussion of the role of the extracurriculum in general education we come now to the most crucial question. What value have extracurricular experiences for the transference of behavior, attitudes, and ideas learned by students to the behavior of these same students when they have become adults? Apart from any immediate benefits for developing the student as a student, we are principally interested in the extracurriculum with regard to its possible uses in preparing students for adult citizenship. If the extracurriculum has only limited usefulness in the educating of students for adulthood, then it may remain as it is today, a peripheral fringe on the curriculum of the classroom. But many studies report that college alumni remember and evaluate their pleasurable extracurricular activities as of greater importance to their adult activities and responsibilities than were their classroom experiences. Since distortions of memory may conceal other types of transference, more critical experimentation is needed to determine possible permanent effects of both curricular and extracurricular experiences.²⁹ We must find answers to the crucial question: Do points of view learned in the extracurriculum have transference potentiality? If so, to what other life experiences may the learnings be transferred and how may the transfer be assured? The reverse of this question is also important — Do students seek to apply what they

²⁸ E. G. Williamson, B. J. Borreson, and Robert Irvine, "Learning Habits of Charitable Giving in the Extracurriculum," *Educational and Psychological Measurement*, XI (Spring, 1951), 103-20.

²⁹ Pace, *op. cit.*, chap. viii; Chapin and Mehus, *op. cit.*; Bridgman, *op. cit.*; Kelly, *op. cit.*; Mary Ethel Courtenay, "The Persistence of Leadership," *School Review*, XLVI (February, 1938), 97-107.

learn in classes to their out-of-class life in school or college? and after graduation? In what respects and ways? Is no such relevancy or relationship discerned — that is, do students perceive class materials as isolated and unrelated to out-of-class life? Thus we see that the interrelations and interchanges between class and out-of-class experiences are most important tests of the value for the individual and for society of both formal and extracurricular learnings. We are justified in centering our stress upon the basic unity in the individual's developmental experiences as opposed to the conventional divorcement of classroom and extracurricular learning.

CHAPTER XII

EVALUATION IN GENERAL EDUCATION

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Current programs of general education differ notably in their design and operation, ranging from those that seek to restore the classical studies to a central position in education to those that attempt a basic reorganization of subject matter and teaching procedures around identified needs of students. They also envisage somewhat different end-products, though differences here are not yet as sharply defined as those relating to the means advocated. Though these newer programs stand united in their protest against the excessive fragmentation and specialism that have undermined liberal education in the past half-century, they operate from quite different premises as to what it means to be an educated person, as Taylor's discussion (chap. ii) clearly shows. Moreover, the radically different methods used will tend, over a period of years, to accentuate the initial difference in objectives. For no matter how clearly means and ends may be distinguished for purposes of analysis, they are really interdependent, constituting an inseparable action-unity.

It seems pertinent, therefore, to raise two fundamental questions in appraising current developments in general education: (a) To what extent are these programs achieving the particular objectives that have been set for them? (b) Are these objectives the proper ones, or should the ends themselves have been conceived somewhat differently? These probing questions, which bear directly on the validity of both the means and the ends employed in contemporary programs, set the broad dimensions of the task of evaluation in general education.

THE CONCEPT OF EVALUATION IN GENERAL EDUCATION

All teachers and students engage in some informal evaluation, for

whatever is learned is usually accompanied by some appraisal of it. But it is only within the past twenty years or so that educators have used the term "evaluation" to refer to fairly systematic and careful process for investigating the worth of an activity or program. In general, the concept is a more inclusive one than those with which it is frequently confused, such as "testing," "measurement," and "grading." For it signifies a deliberate effort to match the purposes of an activity against various evidences which suggest how far these have been attained, resulting in certain conclusions regarding the adequacy of the means used and, even in some instances, of the ends themselves. Though tests and statistics provide invaluable help in gathering, refining, analyzing, and synthesizing evidences, the emphasis shifts in evaluation from tools and techniques to the formation of sound judgments concerning the discovered outcomes.

The first step in appraising any course or program of general education is obviously to find out what its principal goals really are, for no educational experience can be properly evaluated without clear knowledge as to its desired ends. Often these objectives have not been formulated systematically, making it necessary to devote a good deal of attention to identifying and stating the program's major purposes in a form amenable to evaluation. In many of the better studies goals are defined in operational terms — namely, as those changes or modifications in students' behavior which are being sought from particular learning experiences. This attempt to clarify purposes tends to improve instruction itself; it also gives more specific meaning to the term "desirable," thereby making possible an explicit appraisal of outcomes.

Designing a study adequate to answer the questions or to test the hypotheses involved should be the next step, though precise advance planning has often been neglected in educational appraisals. Clear statements of purpose will have aided immeasurably in specifying the particular hypotheses which are to be examined. A plan must then be evolved for selecting the populations to be employed (including such control groups as may be required), gathering the necessary data, and analyzing them in such a way as to answer the basic questions that motivated the study.

To collect relevant evidences concerning the attainment of goals, it is usually necessary to select or construct valid instruments and to use them under properly controlled conditions. As we have taken better advantage of the logic and tools of measurement, larger and more complex aspects of behavior have been assessed, including not only the usual subject-matter learnings but interests, study skills, attitudes,

ideals, and emotional and social maturity. Once these data have been gathered and subjected to the proper statistical tests, the total set of findings must be interpreted in the light of the program's major objectives.

While this usually is a complicated process, due to the difficulties of establishing the actual purposes of instruction, obtaining trustworthy measures of their fulfilment, and tracing any direct relationships between the means used and the ends attained, it can be done fairly scientifically. For it really involves the testing of propositions of fact, rather than the making of value judgments. In other words, we are obligated in studies of this type to find out whether certain expected events occurred, not whether these were the proper ends to seek. Most persons actually conceive evaluation's province as being limited to this, for they look upon appraisal as a procedure for discovering whether valued consequences are coming into being — in other words, whether the means or processes employed are helping us to reach predetermined ends.

But unless it is also possible to determine the relative worth of these purposes, there is little in evaluation that warrants the use of this term. For it would still be necessary to rely completely on intuition when the choice of ends themselves is involved, as, for example, when the use of a given means results in mixed and perhaps conflicting consequences or when alternative procedures yield very different outcomes and some choice must be made between them. If the term "evaluation" has a basic connotation, it involves some value judgment about the desirability or goodness of these results. It implies, therefore, the appraisal of ends as well as the determination of how much progress we have made in moving toward previously accepted goals, as Metcalf emphasizes in his discussion of the appraisal of social studies instruction (19).

While all educational programs need periodic study and review, this seems especially important in the area of general education. Most programs are still in pioneering stages, with their aims, content, and methods often not well chosen or articulated. We urgently need to find out whether these experiences are promoting any real unification in students' thinking and behavior, or whether they contribute little more than lip-service to the idea of integration. The very process of evaluation also helps to focus attention on the problem of goals, translating them from the realm of verbal abstractions into more concrete and meaningful terms and showing the consequences of proceeding according to certain hypotheses (12, 15, 19). While such facts alone may fail

to resolve a particular value-conflict, they lay the basis for a more intelligent choice of objectives.

BRIEF REVIEW OF APPRAISAL STUDIES IN GENERAL EDUCATION

Before examining certain underlying issues, it may be well to recall some of the ways in which programs of general education have been appraised. Occasional findings from these studies will be introduced, chiefly to provide background for a later discussion of research needs in this field.

Major Types of Studies Undertaken

Practically all investigations have been focused on the adequacy of the provisions made for students' general education; the goals themselves have seldom been subjected to incisive analysis or research. At least three major approaches to the study of current programs can be distinguished, though the variety of forms these studies have taken makes any exact classification difficult.

Among the relatively simple studies have been those which have sought to identify the kinds of courses and other educational experiences which have been provided for purposes of general and liberal education. While these do not probe deeply, they are useful in getting an overview of programs in this rapidly expanding field. Catalogue statements and other published materials relating to the nature and scope of courses offered in a particular institution have sometimes been matched against the college's own statement of aims or certain formulations advocated by educational leaders. More illuminating studies of this same character have involved a thorough analysis of syllabi, reading materials, instructional methods, examinations, and extraclass activities carried on in this connection. A clearer picture has thereby been secured of the kinds of experiences which the college has made available with a view to helping students attain a sound general education.

A description of course offerings may in some cases become a backdrop for intensive study of the elements that enter into the programs of individual students. For while a college may offer a wide variety of courses and other opportunities in general education, individual students may avail themselves of only a limited and sometimes not well-related combination of these. As several studies have shown, the programs followed by individual students are often quite narrow and restricted, diverging widely from faculty expectations based on the college's extensive resources in this field.

A second common approach has been to find out how competent observers or the participants themselves view a given program in general education. Persons closely associated with this development have frequently been invited to assess its accomplishments and to share, with equal candor, their views regarding its gaps and inadequacies. Such discriminating judgments may be sought from faculty members, administrative officers, visiting experts, and students and former students. More rarely, representatives of the college's supporting clientele and other lay persons who are familiar with the program may be asked for their opinions on these matters.

While these first two approaches provide many helpful leads, they do not reveal what students have actually learned from these experiences—to what extent their knowledge has been increased, their horizons broadened, and their loyalties and aspirations raised because of work taken in general education. To secure evidence on this latter and far more crucial point, studies of a variety of types have been undertaken. Some have been relatively short-range studies involving a single course or sequence, as when individual teachers have devised some systematic means for evaluating their own instruction. Instruments used for this purpose have included pre- and post-tests geared to the course's principal objectives, surveys of students' reading and study projects, inventories of interests, opinions, and beliefs, and records kept of participation in relevant extraclass activities to find out how the ideas and values of class members have been affected by this teaching. In the more carefully designed studies, some kind of control group has normally been introduced, making it possible to compare the achievement of students who are taking a course which has been explicitly devised for purposes of general education with that of students following a more traditional course or receiving no formal instruction in the field.

Certain other studies of this same general character have been broader in compass, involving the total program in general education and becoming the joint responsibility of a local faculty committee or research bureau, or of a co-operative council made up of representatives from a number of participating colleges. In the occasional studies of this type, comprehensive examinations have usually supplemented regular course tests in assessing outcomes, and a variety of other means has been used to identify those learnings that cannot readily be probed through pencil-and-paper tests.

A number of college faculties have instituted follow-up studies of their former students as a still further means of appraising their pro-

grams. While these studies are usually designed to shed light on the values of the total program rather than the work in general education exclusively, most of the questions employed relate to the more common duties and responsibilities of adult life, such as are involved in being a good husband or wife, parent, friend, and citizen. Since these are cardinal concerns of general education, the findings have special implication for programs in this area. Usually the student himself has been approached, from one to ten years after he has left the campus, to provide the basic information regarding his present activities, problems, and levels of aspiration. In order to secure a more reliable picture of his postcollege adjustments, his later school and employment record has usually been studied. Occasionally, too, the opinions and judgments of close associates have also been sought. Though this type of study has distinct limitations, some of which will be discussed later, many school and college faculties have obtained tremendous stimulus and help from this approach. Particularly has this been true when several groups of young adults have been studied, making it possible to compare the postcollege status of graduates with that of nongraduates or of young people of comparable ability who never attended college, or to explore the later activities and achievements of students who followed quite different types of college programs.

Principal Findings from These Exploratory Studies

Probably the most striking impression gained from a survey of pertinent literature is the meager extent of such research. Studies are available for only occasional institutions or groups of colleges; most of these canvass limited aspects of the program; practically all are of the descriptive rather than experimental type. This dearth of adequately designed studies constitutes a special handicap to persons establishing new programs, for evidence is lacking to decide many questions on grounds other than purely subjective judgment.

These exploratory studies certainly provide no clear-cut indication that any one program of general education is notably superior to others offered in this field. Though current programs vary notably in their underlying philosophy and implementation, objective evidence is lacking to corroborate any faculty's claim that it has discovered the one best program of general education. Seldom is it possible to compare students from different colleges on a number of pertinent measures — let alone pick out the one outstanding program.

Yet experimental programs seem, for the most part, to be justifying the assumptions under which they have been operating (8, 10). In his

study of the Bennington program, for example, Eurich found that students who followed programs of general education suited to their particular interests and diagnosed needs "acquire a general education as measured by subject-matter tests that is as thorough as that acquired by students who follow rigidly set patterns of courses" (9). The review of the literature on this point in the recent *Encyclopedia of Educational Research* similarly concludes that "students who have taken courses of the broad, integrated type, as contrasted with the usual departmental introductory courses, do equally well on the measures ordinarily used to determine academic attainment in the conventional offerings. In addition, there is some evidence that they achieve other desirable outcomes in greater measure than students taking the more conventional types of courses (17). Investigations of this character will have to be continued for some years, of course, to distinguish outcomes which are intrinsically related to the new program from those arising from teachers' and students' initial enthusiasm for a fresh approach, which frees them from formalized and stereotyped patterns of education.

In general, students' later patterns of participation and interest tend to reflect particular emphases in college programs. This was brought out clearly in the follow-up study of 2,500 Syracuse alumni (23, 32), where Pace reported that "patterns of activity and opinions are high in those fields most closely related to students' major fields of study in college and correspondingly low in most other fields."¹ Even when other factors relating to ability and socioeconomic status had been controlled, Pace found that "graduates in the liberal arts exhibited, by and large, a more balanced picture of interests and attitudes than did graduates in professional and technical schools," indicating that "college does make a difference — also the particular kind of college chosen." Bond, too, in commenting on findings from his experimental study of the teaching of genetics for purposes of general education, states that "changes in attitudes take place in the direction for which the instruction is planned. To foster greater development of attitudes considered desirable, such development should be definitely planned for" (2).

Though the evidences gathered to date show that some of the newly designed programs *do* help students attain the purposes of general education, they encourage no great optimism. Not only is there often a marked discrepancy between college resources in general education and

¹"High" is used here in the sense of showing relatively more participation and interest than the average college graduate does in the area studied.

the use students make of them (18) but also the actual outcomes of these experiences typically fall well below anticipated levels (4, 8, 10, 22, 32). The deficits are particularly conspicuous, too, in those traits which are most likely to influence future conduct, such as attitudes, interests, aspirations, and values. As Eurich comments on this disquieting finding: "The results from follow-up studies of former college students and graduates are discouraging and leave much to be desired in the way of effective living in a democracy" (9). Students normally show up much better on the usual academic learnings — the points specifically stressed in college classrooms — than on these broader and more permanent outcomes of a general education. General education evidently has much "unfinished business" if it is to achieve the significant goals set for these new programs.

SOME BASIC ISSUES IN APPRAISING GENERAL EDUCATION

Proponents of general education differ markedly in their attitudes toward evaluation and in the procedures they would employ. Some would not make any serious appraisal through the means suggested above; others would differ in the reasons why they would initiate studies and in the manner in which they would conduct them. They would apply quite different criteria, too, in interpreting and applying the findings. And since few people operate from a clearly defined philosophy of education, these appraisals might be influenced quite as much by particular interests of faculty members and local circumstances as by their underlying beliefs.

In an attempt to discover the underlying rationale of evaluation, the two sharply contrasting views (the rationalist and the instrumentalist) outlined in Taylor's chapter are examined in the present section from the point of view of their meaning for a program of appraisal. Since the neo-humanist position is essentially eclectic, it provides few clear benchmarks in this area and will consequently be omitted in the following discussion. Occasional references will be made to the contrasting psychologies of learning outlined in Corey's chapter and to Havighurst's discussion of the social foundations of different schemes of general education. But these latter points will be treated less systematically than the differences in basic philosophic orientation.

The distinctions outlined below are drawn more sharply than they would be in practice because compromises must often be made to adjust theories to actual operating conditions. Hence, the discussion that follows does not set forth so much what proponents of these two views have typically done as what they might do, were their practices logic-

ally consistent with their beliefs. Also, it should be remembered that the distinction between the two extreme positions is often one of emphasis—of where the stress will fall—rather than one of the “either-or” variety.

Importance of Appraisal

The chief spokesmen of the rationalist position pay little attention to any objective means or methods by which their programs might be judged. Just as they typically ignore the psychology of learning in their discussions of general education, so they pass lightly over the question of how outcomes are to be tested. So long as the content of the program harmonizes with their concept of what general and liberal education ought to include, they apparently feel scant need of appraising its effectiveness. Many of them, in fact, would reject the whole concept of evaluation as it has been outlined in the preceding discussion, maintaining that the goals sought are “ends in themselves” and not subject, therefore, to empirical study and analysis. Because of their silence in this regard, it has been necessary to infer their position on certain questions from other statements they have made, with the possibilities for error that this always involves.

The instrumentalists, in contrast, give a great deal of prominence to appraisal, making frequent mention of its central role in clarifying and appraising learning outcomes. They believe that as long as education is conceived as a dynamic process, evaluation must contribute to the definition of aims, to the careful consideration of proposed changes, and to the sharper focusing of teaching effort on really important goals. It is significant, too, that practically all published appraisals of general education have come from colleges subscribing to at least a modified form of the progressivist doctrine. At the same time it must be recognized that most subscribers to this doctrine have been naïvely empirical in the approaches they have used, few of the studies to date being adequately designed to fulfil the high objectives set for evaluation in general education.

The Purposes of Appraisal

Since evaluative studies should be planned in the light of the cardinal objectives of a program, the latter must first be clarified. Persons operating from the rationalist position hold that the primary aim of such programs is to develop a common set of ideas and ideals, promoting maximum realization of man's common humanity. Hence they would tend to ignore individual differences and to focus their

appraisals (were they motivated to make such studies) on outcomes which they believe every individual admitted to programs of higher education should acquire, regardless of his particular cultural background, interests, or sense of need.

Instrumentalists, on the other hand, stress the contribution of uniqueness in a vital, ongoing society, maintaining that a sense of real interdependence is fostered when people bring different backgrounds and talents to a common task. Because they believe that the objectives of general education should be quite broadly conceived, they often advocate considerable flexibility in developing educational patterns for individual students and different groups of students. Their instruments of appraisal would, therefore, be developed with at least a partial view to discovering and encouraging those individual variations which give promise of enriching personal and social living. Instead of expecting all students to attain the same outcomes (most rationalists would, of course, recognize differences in degree of accomplishment of these objectives), the thoroughgoing instrumentalist would view a jagged profile of achievement as being more in accord with what is now known about human abilities, interests, and motivations. So long as the pattern seemed consonant with a particular student's life goals, the instrumentalist would be willing to accept low performance in some areas of general education, particularly if this were offset by superior accomplishment in others.

The rationalists and instrumentalists would also hold different views as to how the major goals for a program (and its later evaluation) should be established. In general, the former would set their objectives in the same manner as they establish other guiding principles; namely, through a priori reasoning (using the latter term to refer to processes of contemplative and deductive thought, as distinguished from the logic of inductive inference). In line with this position, they would look to persons especially skilled in these dialectical processes to outline the principal goals for their programs of general education.

The instrumentalists, on the other hand, would properly employ a variety of methods, at least partially grounding their objectives in searching studies of social trends and of the present and presumptive future needs of students. While not ignoring the directional leads gained from study of our cultural heritage, they would strive to discover traits students "must" acquire to enjoy minimal success in today's and tomorrow's world. This difference is a fundamental one, since the instrumentalists' position logically requires a reformulation of goals as social conditions change. In fact, the more extreme advo-

cates (the "reconstructionists") would actively foster social change, using schools and colleges as deliberate instruments for promoting their social objectives. If the instrumentalist (progressivist) assumptions are accepted, evaluation processes must themselves be in a state of flux and change.

General Leadership and Participation in These Studies

The philosophic orientation of the faculty concerned should also determine to some degree the way in which these appraisal studies are organized and conducted. From the rationalist point of view, it would be reasonable to rely chiefly on scholars and experts in the field in developing the program of evaluation. Hypothetically, these would be the persons who had real insight into the underlying objectives and who would, therefore, be most competent to judge outcomes. Were this view adopted wholeheartedly, regular instructors would be released from all responsibilities for appraisal and this task assumed by college boards of examiners or, in some instances, by external examiners. Instruction and examining would be sharply separated, since the prime purpose of examining, according to this view, is to find out how well teaching and learning have measured up to the standards set for them.

Instrumentalists hold a very different view, maintaining that persons who work closely with students (teachers, counselors, librarians, student-activities directors) should take a responsible role in planning and conducting these appraisals. Instead of remanding this task to boards of examiners, they are more likely to establish research bureaus on the pattern of those operating at Minnesota and Syracuse, where the motivating objective is to assist faculty members in making their own studies of educational problems. This broad faculty participation in defining goals and suggesting evaluative procedures should result, they argue, in a sharper focusing of appraisal on outcomes actually sought from college experiences in general education. Implicating these people in the task of finding out how well school or college programs have attained these objectives may also, according to this view, promote a more rapid translation of findings into practice. For teachers who have participated in such studies are likely to view their own work in a new and more relevant light. Instrumentalists are likewise beginning to look to persons outside the school (business, civic, and social leaders) to aid in setting sights for these new programs and in judging their effectiveness.

The role that students play in evaluative studies should be sim-

ilarly affected by general philosophic considerations. According to the rationalist view, students should be tested and evaluated by others, being constantly challenged to measure up to the high standards set for their learning. They must be able to demonstrate the real breadth and depth of their knowledge on examinations set by persons who are not their instructors, and who, consequently, may be more objective in their appraisal of students' mastery.

The instrumentalists, in contrast, emphasize the central and strategic role of the learner in evaluation, contending, as Boyer does, that "self-evaluation under guidance makes for mental health, improved control of subsequent behavior, and dynamic learning" (3). Naftalin suggests in chapter vi that students in social-studies courses should be assisted in articulating their own value structures, as a first essential step toward integrating their learnings. Some instrumentalists go to considerable length to enlist students' help in planning and conducting certain phases of these studies, believing that these experiences can be profoundly educative for the students and may also contribute to a better appraisal of outcomes. They argue, too, that improved practice will be more likely to follow under these conditions, since if students themselves sense the need for change, it will help to create an atmosphere favorable to such innovation.

The Scope of Appraisal Studies and the Content and Methods Employed

Still another moot question, though closely related to the earlier discussion of purposes, concerns the desirability of shaping evaluation programs of individual institutions. If the rationalists are correct, programs of appraisal, like the educational experiences they assess, should emphasize basically the same elements in all higher institutions. Assuming that offerings in general education should be unaffected by geographic, political, or social considerations, the techniques used to establish their outcomes would be markedly similar from one institution to another.

The instrumentalists contend that educational experiences must take current and local conditions into account, being consciously tailored to particular philosophies of education, special student clientele, and institutional resources in staff and equipment. Under these conditions evaluative procedures would be planned with a view to exploring certain distinctive as well as common outcomes sought from programs of general education. Testing programs involving a large number of colleges, perhaps of quite different types, might help to

delineate a particular college's accomplishments and deficits, but they would need to be supplemented with instruments devised to assess special institutional emphases.

An equally important difference concerns the types of outcomes that should be evaluated. No evaluative instrument can be developed without some real conviction as to what kinds of learnings are of the most worth. Should the primary aim be to find out what valid general knowledge the student has acquired (including the mental processes involved in reaching these principles and conclusions), which is the rationalists' view? Or should a variety of other outcomes also be explored, such as the student's personal and social adaptability, aesthetic interests, and sense of moral and spiritual values, as the instrumentalists argue? This poses the highly controversial question, of course, as to whether schools and colleges should deliberately underwrite these other types of growth. Decisions on this point will set the general scope of the appraisal, determining whether it will be centered around intellectual outcomes or extended to assess these other characteristics as well.

The choice of evaluative instruments is obviously contingent on the point of view adopted on the above issue. The rationalists would properly rely on tests of a verbal or abstract type, since the well-educated man will be most clearly distinguished by his superior ability to deal with problems at the conceptual level. The major emphasis in such tests would be placed on understandings or insights for their own sake, rather than as a means to action and belief. As Taylor indicates in his discussion of the rationalist position, "the good life leads in the direction of contemplation," the highest end of human life being to *know* the truth.

While the instrumentalists, too, profess to value highly these intellectual outcomes, they are committed to finding out how far the learnings sought in general education have been transmuted into changed patterns of living. This emphasis on behavior, as opposed to simple verbalization, immensely complicates the process of appraisal, for pencil-and-paper or oral tests must be supplemented with controlled observations, interviews, rating scales, diaries, anecdotal records, sound recordings, projective and sociometric techniques, and similar methods for identifying behavioral changes. Again, it is not difficult to see that, while evaluative measures may be chosen initially in terms of a basic philosophy, their continued use will help to set even more deeply a particular scheme of education.

The subject content that would be used in building these instru-

ments points up still another distinction between the two views. According to the rationalist view, the materials utilized in testing students' progress should be drawn largely from the great writers of our western cultural tradition, since students' familiarity with these constitutes the best guarantee that they understand the deeper roots of our present problems. Instrumentalists, on the other hand, would properly employ a wide range of contemporary situations and problems, illustrative of those which students would be likely to encounter now and in their adult years. Instead of drawing heavily upon our literary traditions, they would make greater use of the social and natural sciences, the fine arts, and creative activities in developing their instruments.

Planning an educational appraisal involves more than deciding on the types of outcomes which are to be explored and the appropriate methodologies. For the program must also be formulated with a clear view as to the kinds of students whose development is to be studied. Here again the proponents of these contrasting views of general education would proceed quite differently. Since the rationalists believe that college education should be limited to students who are quite superior intellectually (having a definite talent for abstract and conceptual learning), their evaluative instruments, as their instructional programs, would be designed with primary concern for this elite group. If the resulting tests and other measures did not differentiate well among students of lesser ability, this would not be of too great concern. For, according to this view, such persons do not rightly belong in college.

Most instrumentalists operate from quite different assumptions, believing that college programs of general education must be planned to serve students drawn from an increasingly wide range of abilities, social backgrounds, and interests. While they declare their interest in the verbally gifted student, they express almost equal concern for identifying other types of talent and accomplishment. Maintaining that a relatively broad distribution of social intelligence is essential in a democratic society, they would extend collegiate opportunities for general education to many more students than now attend — in fact to as many as give promise of profiting from some work beyond the high school. Moreover, they would build these programs and appraise the resulting outcomes with some attention to each student's unique pattern of growth and development.

Still another distinction might lie in the period of time required to reach a sound appraisal of an educational program. Should such

evaluation be restricted to school years, which would reduce the task to more manageable dimensions? Since the rationalists believe that a student who has thoroughly mastered general concepts and principles will apply them whenever relevant occasions arise, they would logically concentrate efforts on finding out how much real insight into these principles students have developed while they are still in school. Granting their premises, this procedure would be more defensible than trying to trace some of the myriads of later applications students make of their school learnings, especially since these uses must often be evaluated in terms of the particular context in which a problem has arisen.

The instrumentalists, having much less faith in any automatic transfer of training, as Corey shows in his chapter, consider that students' later out-of-school living furnishes a crucial test of any program of general education. For they maintain that while evaluation should parallel every stage of instruction, growth gains cannot be measured adequately until after the individual has had ample time to reconstruct and evaluate his school-learning experiences. Hence they would seek to assess not only the present achievements, activities, and aspirations of students but also their later social and vocational roles, hoping through this latter means to find out whether principles, skills, and outlooks stressed in general education have been translated into more effective patterns of off-campus living.

The Interpretation and Use of Findings

No test or other evaluative instrument will ever provide a direct and unequivocal answer to the question of how valuable a given program of general education has been. For the evidence derived from tests, ratings, follow-up studies, and other means provide a great number of clues which must be interpreted thoughtfully in order to reach valid conclusions. Facts and figures are devoid of meaning until some qualified person examines them thoroughly and begins to speculate on their import. What criteria, then, would rationalists and instrumentalists be likely to employ in surveying evidences gathered concerning some course or program of general education?

This bears directly on one of the most difficult problems in philosophy—namely, how values should be tested. There could be no appraisal in any real sense of the word unless the persons making it had some normative convictions—holding to some criteria or standards that result in their valuing certain outcomes over others. According to the one view—that of the rationalist—the identified outcomes should

be judged in terms of their consonance with a set of absolute values derived from metaphysics or theology, presumably reflecting factors inherent in the universe and in the relation of man to nature. The instrumentalists would approach the problem quite differently, valuing each outcome according to its consequences — the functional worth of these insights, skills, or attitudes to persons in our present society. Those traits and competencies would be deemed most important which helped the individual, in clearly demonstrable ways, to cope with his present and foreseeable future problems. Hypotheses would be given the test, in other words, of predicted and verifiable consequences (6).

The standards used by the instrumentalists admittedly would not be established with the high precision associated with absolutist views. In place of fixed aims or principles, every end would be looked upon basically as a means to a further end.² Complete certainty would, therefore, have to be replaced with statements indicating the degree of confidence that could be attached to a given proposition. According to this instrumentalist view, the more that was known concerning the consequences of certain learnings, the greater would be the educator's assurance in recommending them to future groups of students.

Another distinction, though perhaps not as significant as the above, relates to the attention that should be paid to the total constellation of outcomes discovered in evaluative studies. Should primary emphasis, in interpreting an individual's record, be placed on his status with respect to a few highly valued characteristics, or should the general patterning of outcomes be of greater concern? The rationalists would argue for the central importance of a few traits, pointing out that the student who lacks ability to work with the basic ideas and principles emphasized in general-education courses will be severely handicapped, whatever his other assets. Most instrumentalists would contend that the extent and character of the relationship that exists among various traits may be fully as important as their absolute level in determining the individual's effectiveness. In consequence, they would attempt to secure an inclusive portrait of an individual as a basis for appraising his educational development.

A final point of difference relates to the uses which are to be made of findings from such appraisals. Should they be employed

² While instrumentalist theory assumes no "preconceived, fixed objectives, many persons subscribing to this doctrine seem actually to be predetermining their ends almost as much as the rationalists do. As Naftalin points out in his chapter, the value systems of such persons would seem to be based upon rationalist principles of deduction.

basically to judge the students involved, measuring them against previously defined standards? Or should their implications for the further development of the program of general education receive chief attention, in the hope of organizing future learning experiences more effectively? In general, the rationalists would be more concerned with seeing how students measure up to faculty expectations for them, whereas the instrumentalists would show a greater readiness to use the findings as a partial basis, at least, for reorganizing the program itself. A faculty's orientation to evaluation will be quite different, obviously, if its guiding purpose is to appraise the academic status of students than if it is to modify or change the program with a view to promoting greater learning values.

SOME SUGGESTED PROBLEMS FOR RESEARCH IN GENERAL EDUCATION

The foregoing statement of issues suggests how differently persons operating from two contrasting philosophical positions might conceive the evaluative process. It underscores the need for studies focused on some of these problems so that more data will be available to determine what these sharply divergent views actually mean for students' attainment of characteristics sought from general education. Faculty attitudes and outlooks in programs operating from these different premises should also be explored, since no program can rise higher than the staff's own interest and commitment to it.

The following list of problems indicates but a few of the many kinds of studies which will be required to develop the range, variety, and quality of learning opportunities which general education demands. They are intended chiefly to illustrate the central importance of evaluation and research in projecting new courses or programs and in improving established ones.³ They highlight the need, too, for developing a more explicit theoretical framework to guide research in this field, instead of relying so greatly upon blind empirical approaches. A systematic attack, centered around the testing of a few central hypotheses, would provide a far sounder basis for generalization than do our present piecemeal approaches.

³It is interesting to note that the National Education Association's Committee on General Education, in a recent survey of the problems American colleges and universities are encountering in their development of programs in this field, discovered that, in 121 of the 169 replies received, the need for help in evaluating outcomes was stressed. Problems associated with such appraisal ranked first among all those suggested in this survey of needs (24).

Research on the Aims of General Education

The objectives of these newer programs justify searching study. While proponents of different plans profess concern for many of the same goals, such as effective citizenship and a broad communion of minds, these may be conceived quite differently. It is probable, as Taylor's discussion suggests, that "responsible citizenship," while a frequently stated aim of all schemes of general education, would mean something quite different if defined in operational terms. The concepts of both "the more abundant personal life" and "the stronger and freer social order" in which human potentialities can be realized need to be developed more explicitly, being spelled out in terms of characteristics which the generally educated person might be expected to exhibit. In other words, how might he *think*, *feel*, and *act* when confronted with certain important and recurrent problems?

Research is also needed on the problems involved in classifying these objectives. Thus far we have grouped them, as Tyler (30) and Flanagan (11) have pointed out, according to the apparent psychological process involved, which places a great deal of emphasis on intuitive judgment. Application of some of the newer factor-analysis techniques will perhaps enable us to set up more homogeneous categories. Research of the type which McConnell reported some years ago is also required to determine relationships among these various objectives (16). In addition, the theories of truth, knowledge, and value involved in these formulations of objectives should be studied more critically. Otherwise, there will be no real intellectual center to the program of general education.

Studies of Students Who Take General-Education Courses

Carefully designed studies of the "consumers" of general education — the students for whom these new offerings have been devised — constitute one of the foremost needs in this field. As Raushenbush and MacLean indicate in their chapter, few programs today are securely anchored in a sufficient body of facts concerning the backgrounds and abilities, present and future needs, of students enrolled in these sequences. Yet such evidences are indispensable if teachers are to know where to start their work or are to have any basic reference points against which to evaluate students' progress. Studies made at Minnesota's General College (33), Stephens (13), and Sarah Lawrence (21, 25) are especially notable in this respect, emphasizing as they do,

how teachers, counselors and research experts can work together in attaining this broad understanding of students and their problems.

Studies of students would be invaluable, too, in another connection, since they would throw light on how a given program of general education is related to the social structure. Havighurst's discussion in chapter iv indicates our need for knowing how fully various programs serve young people from all economic levels and from different racial, religious, and cultural backgrounds. For failure to attract qualified students from certain groups in our population may point to cardinal weaknesses in the program itself.

Studies of Different Types of General-Education Programs

Most practices in general education, as in other phases of education, still rest on an intuitive basis. Little is known, for example, as to the actual values of the major approaches which are now being employed in developing programs of general education. What do students really learn, for example, when they study under a curriculum of the "great-books" type as compared with one devised around their identified "needs" or certain recurrent social problems? Protagonists of each view, to the extent that they evaluate at all, tend to gather evidences wholly in terms of what they consider to be important outcomes of their own particular program. Consequently, we know practically nothing as to the possible values of one approach in promoting learnings which are highly cherished by advocates of a quite different scheme. Nor has any appreciable light been thrown on the question of how students from other ranges of academic aptitude or economic status—to suggest only two of dozens of factors which differentiate college populations—would thrive, were a well-publicized curriculum transplanted to a college serving a very different clientele. Neither have we explored carefully the conflicting consequences that may follow certain curriculum innovations. Whereas the "needs" approach may help students to^o develop a greater sense of emotional and personal security, it is conceivable that, by reducing the dimensions of students' problems, it may also curtail opportunities for learning the processes and concepts of reflective thinking (19).

Evaluation studies could be extremely helpful, too, in deciding on the particular kinds of courses that might implement these general approaches. So far we have proceeded almost entirely according to the feelings of subject-matter specialists, following their judgments as to how hard or easy it would be to effect a particular reorganization of content. Hence, we do not really know how effective departmental

offerings in general education are as compared with those of broader scope. Nor have we investigated how survey courses compare with those that have been deliberately centered around a few crucial problems or issues in the field. It would be important, also, to determine whether a succession of relatively brief courses (quarter or semester courses) in related fields serve students as well as do longer integrated sequences (requiring two or three years).

Similarly, there is a great lack of tested knowledge as to how to proceed in selecting and organizing the learning experiences provided in our individual courses in general education. Is it possible to order these activities in such a way that the sequence is not only one of subject-matter but of tasks making progressively greater demands in terms of the traits or competencies sought through these means? Do students who vary widely in background, aptitudes, and educational and vocational intentions profit from courses of somewhat different design? Can the subject-matter and other experiences included in these courses be so selected that gifted students will be constantly challenged to achieve at a level commensurate with their talents and abilities instead of being content to meet standards set at the level of the mediocre or marginal student?

Imaginatively conceived studies might help to solve another perplexing problem in general education — namely, the extent to which students should follow a definitely prescribed sequence of courses in this field. How do students who take a common, prescribed program compare, in the range and relevance of their learnings, with those whose college experiences in general education have been selected on the basis of individual interests or needs? Which type of curriculum prepares youth more effectively and economically for their present living? for those later demands which can scarcely be forecast during undergraduate days? Arguments advanced by the protagonists of these two views would become more convincing were they buttressed with some data to support *a priori* speculations in this regard.

Another controversial point involves the proper way of relating the general and the specialized phases of education. Do students profit as much from a program in which specialized and professional education follows a broad grounding in general education as from one in which these two aspects are pursued simultaneously? Certain studies, made in institutions where general education is primarily the concern of the lower division, reveal no significant increment in the development of these broader insights and understandings during the last two years of college residence (27). Have students really

been stimulated under this plan to regard general education as a life-long responsibility rather than one entirely discharged through courses set up for this specific purpose? Such questions should become increasingly important, as Havighurst's discussion suggests, when educators address themselves more seriously to the task of extending the general education of employed young workers and of adult citizens as well as of students still in school.

Studies of Instructional Methods Used in General Education

Most studies and discussions of general education have centered chiefly around problems of curriculum design. It is apparently assumed that the methods used in teaching are not too important and, hence, may be left wholly to the preferences or judgments of individual instructors. Yet there is a growing body of evidence to show that students' learning can be greatly reinforced or retarded by the setting in which it occurs and by the specific encouragement and guidance which individual teachers afford their students.

"Methods" studies might be more fruitful if they gave major attention to how the individual student approaches and pursues his studies in a given field. To date, most studies of college learning have been based on evidences which an observer could gather and interpret. Investigations are urgently needed which look at the learning process from the student's own perspective, revealing what goes on in his mind as he is confronted with new learning problems. For example, what does he consider it important to learn? This point has been neglected, despite mounting evidence that there is a "fairly direct line between conviction about the worth of various goals and progress toward these goals, not only in college but also in adult interests and insights" (23). Also, what mental processes does the student employ when confronted with a novel situation (1)? To what extent are his perceptions of materials and problems considered in general education colored by his own prior experiences, his personal values, and immediate behavioral stresses and strains? How does his extending insight affect his concept of himself? his sense of security? Studies of these and related problems from the phenomenological point of view, building upon the significant work already done by Snygg and Combs, Heider, Lecky, Marlow, and several others, should help us gain a new appreciation of the true inwardness of the learning process. To gain satisfactory answers to the questions raised above, instructors and students must be alert to a great variety of clues, gathering through day-by-day

appraisals as well as more formal methods of evaluation the necessary evidences as to how learning is best promoted in general education.

Similarly, few studies have been made of social factors affecting students' interest and progress in general education. But the little that is currently known about the influence of social-class background and the particular group situation in which the teaching-learning process occurs highlights this as a particularly fruitful area for research. Most educators have concentrated their study on traits of individual students, such as their measured scholastic aptitude, interests, or preparation in a specific field, relating these to achievement in a particular course or curriculum. Yet these specific factors may at times be greatly overshadowed by the operation of social forces.

To study these cultural-personality interactions, a whole new group of techniques is being evolved, including sociograms, psychodramas, attitude scales, thematic apperception and other projective tests, and a variety of other measures for observing and analyzing individual and group interactions. As Wrightstone notes: "Psychologically, stress on interaction now supplements that placed upon reaction" (35). Preliminary studies show that an autocratically structured learning situation accents tendencies toward aggressive behavior or overconformity, whereas a more democratically conceived one promotes initiative, spontaneity, and a sense of group responsibility (14). The discerning teacher in general education must be helped to find out much more about these matters, so that he can lay the foundation for good interpersonal relationships among members of his learning group, promote a freer communication of ideas, and develop a real sense of partnership with students in carrying on learning activities.

We also need to test the efficacy of the various instructional techniques that we have been employing as teachers. Are some methods demonstrably more efficient than others in arousing students' zest for learning? in leading them to search actively and attentively for relationships among the things they are studying? in helping them to compare, relate, and integrate these various learnings? Are students educated in programs that emphasize direct observation and participation as well as reading and class discussions more likely than others to discern broader meanings and apply their growing knowledge and insight with real discrimination? Merely to raise such questions is to show our profound ignorance regarding appropriate teaching methods in general education.

Studies of Out-of-Class Experiences in Their Relation to General Education

Few colleges have slanted their evaluative studies to identify the special contributions that extraclass experiences make to students' general education, as Williamson points out in his chapter. We still do not know the extent to which a richly stimulating environment, on and off the campus, may re-enforce classroom learning. Nor do we know in what specific ways counseling, student activities, dormitory living, work experiences, and participation in other nonclass activities affect students' achievement of these objectives. Critical studies of the values of extracurricular activities and services should make it possible to co-ordinate these with instructional provisions in order to produce a more genuinely functional and meaningful pattern of education. They might reveal, in fact, that certain outcomes sought in general education, such as skill in working with other individuals and a keen appreciation of their worth, can be promoted more directly through a discriminating use of extraclass experiences than through even the most skilfully devised classroom program.

Studies Relating to the Staffing of General Education

Most teachers communicate to students their own enthusiasms, attitudes, and values, as well as the particular knowledge or skill they are striving to develop. Courses in general education, by the very breadth and originality of their design, require instructors with lively interests in several fields and a well-developed philosophy or perspective of life. The selection of qualified teachers is, therefore, a matter of first importance, as Bigelow stresses in his chapter, and should be given a high priority in our research in general education. Are certain patterns of ability and preparation more likely than others to insure successful teaching in this area? How can teachers be used most effectively in these programs — as teams of specialists who contribute on topics that fall within their individual areas of competence or as persons who assume full responsibility for a course, even though this sometimes requires them to go far afield from their graduate specializations? Are some teachers better suited to instruct in certain ranges of ability than others? Are they more likely to do creative work if general studies courses constitute their sole responsibility or if they divide their efforts between courses of these new designs and more advanced offerings in their own departments? Still other studies are needed to explore institutional conditions affecting

teachers' morale, which will inevitably influence the quality of their work. Who are being assigned to teach courses in general education — the ablest members of the staff or the inexperienced or mediocre teachers? How much academic and financial recognition normally accompanies successful teaching in this area? How can a stimulating interchange of ideas be promoted among faculty members on the local campus, developing an atmosphere favorable to innovation and research?

Studies Relating to Methods of Evaluating Outcomes of General Education

Techniques of experimental design and appraisal also require continuing study, if relationships between the various means used in programs of general education and the outcomes achieved are to be established with any precision. Studies made to date are probably more vulnerable on this point than any other, for few of them constitute an appropriately designed and rigorous attack on the problem studied.⁴

Application of some of our newer statistical insights — notably the recent advances made in the theory and applications of sampling and inferential statistics — would vastly improve evaluative studies in general education. With appropriate sampling — a point that has been sorely neglected in most studies — results could be more defensibly generalized. The techniques developed by R. A. Fisher and his colleagues also make it possible to employ much smaller samples and still draw rigorous conclusions, making for both greater efficiency and economy in experimentation. Instead of holding to the artificially-conceived single-variable type of study, it is now possible, through the use of multivariate designs and statistical controls, to include several variables simultaneously and to study their effects and interactions under different circumstances. Consequently a far greater variety of experimental designs is now available to explore the problems out-

⁴The attention given in this section to the more formally designed and rigorously executed study should not be construed to indicate that the informal, day-by-day appraisals that teachers and students lacking statistical training make of their educational experiences are valueless. For these often provide a wealth of illuminating ideas and clues that can then be subjected to more searching examination through methods suggested in the present discussion. Also, with skilful planning, the evaluative activities in individual classrooms can be so co-ordinated with the more general and formalized appraisals which are being made of a college's program as to greatly extend the kinds of evidences on which conclusions will be based.

lined above, which should make for a steady advance in our understanding of general education — its proper content, methodologies, and outcomes.

Real strides have been made, too, in developing more reliable and comparable measurements, so that scores from different forms or types of tests can in some instances be interpreted on a common scale. But our techniques in this regard are still much better adapted to mass, rather than individual, treatment of data. As Traxler (28) and others have indicated, one of our great needs is to develop better case-study techniques of evaluation. Improved methods of reporting and comparing scores achieved on different types of tests would make it possible to trace each student's development over a period of years. With a more precise knowledge of his individual pattern of abilities, his special strengths and deficiencies could be taken into better account in planning his further education.

Refinements in the direction of making tests more valid instruments raise hopes that we may be able to measure the real outcomes of general education with greater sensitivity. Recently developed objective tests, such as the General Education Development batteries and many of the instruments formulated by the University of Chicago and Michigan State College boards of examiners and other groups seeking to improve this type of test, emphasize more fundamental types of learning, probing students' underlying skills and abilities rather than their knowledge of isolated bits of factual information. A good deal more research will be required, however, before the typical objective test will be centered around the developmental and relational aspects of the subject. Essay questions also have been improved in form and made more amenable to accurate evaluation. But the types of questions employed are often inconsistent with our purposes in general education, since they do not call for any fresh analysis of problems or the student's independent thinking with respect to these matters. Too often the questions merely require students to give back the instructor's views rather than to devise solutions of their own.

The influence which the kinds of tests employed in a course or total program of general education exert on students' learning throughout this experience merits more study than has been given it. Does a knowledge that certain varieties of examinations will be employed stimulate students to read extensively? to reflect upon and interpret materials for themselves? to engage in independent studies of these problems? How do the long-range outcomes (assessed at least a couple of years after instruction has ceased) compare when different

types of evaluative instruments have been employed consistently during the learning period?

Tests quite clearly need to be supplemented in order to probe some of the less tangible outcomes of a program of general education, such as attitudes, beliefs, interests, appreciations, ethical values, and social sensitivity. Certain recent studies, notably the Eight-Year Study of the Progressive Education Association (26), the Co-operative Study in General Education (31), the Commission on Teacher Education study (29), and the current American Council Study of Evaluation in General Education (7) have done significant spadework in this field. But the measures evolved will still have to be refined considerably if they are to provide more than first clues to these elusive but highly important outcomes. Much more needs to be done, too, before such instruments can be widely used in the practical classroom situation. It is also essential to find out how to instruct the individual teacher in the proper use of some of these newer types of instruments, such as inventories of attitude and belief, rating scales of various types, and various sociometric devices. Should certain approaches, as, for example, the recently devised projective and expressive techniques, be left to the clinically trained counselor or research expert? These are important questions to explore, for techniques measuring some characteristics seem to be reaching the point where the average administrator or classroom teacher in general education cannot hope to keep pace with developments in this area as well as in his own field of interest.

Yet real learning has scarcely begun at the time we customarily place the greatest emphasis on measuring it, namely during the course or particular experience designed to foster a particular outcome. For what is permanent can be seen in proper perspective, as Davis' analysis of learning studies shows (5), only after the initial confusion attending the acquisition of new understandings and skills subsides and the learner becomes subjectively concerned with the larger meanings and applications of these things. Hence, "many of the most crucial questions about the significance of general education can be answered by no other technique than the long-term follow-up study, however complicated, time-consuming, and expensive it may be" (23). But there has been amazingly little research to date on this whole problem of designing and conducting follow-up studies. The recent work of Pace (23) and Wallace (32) in substituting carefully scaled materials, representing situations of increasing difficulty, for the usual miscellany of items constitutes a notable step forward.

But while current inventories elicit helpful information regarding the later activities and beliefs of college-trained adults, existing techniques are crude, indeed, to probe the motivational factors involved or to assess the more subjective and qualitative aspects of these experiences. The findings are often difficult to interpret, too, because similar information is ordinarily not available for youth who did not go to college or who followed a very different type of program, or even for the same students several years earlier (as to their entrance to college). Still it is an enormously hopeful sign that we are looking beyond the attainments of students in our individual courses in general education to the meaning and use associated with these learnings.

CONCLUDING STATEMENT

The present wide disagreement as to what constitutes general education and how it is best promoted may be viewed by some persons with alarm, as constituting a further omen of cultural disintegration and chaos. To others this diversity of views and approaches is a healthy sign, attesting to the importance and vitality of the movement. For it suggests that the need for a more unified, coherent and meaningful educational experience has been sufficiently great to stimulate improvisations both in the curriculum and extraclass program in hundreds of different educational centers. The sheer number and variety of these new programs is, in line with this view, one of the best assurances that we have not fallen into any safe, comfortable, or stereotyped notion of general education.

But there can be no real hope of clarifying our aims or refining the means used without continuing attention to the problems of appraisal discussed in the present chapter. No program merits the term "experimental," in fact, unless its outcomes are being thoroughly probed and the findings applied with courage and integrity to its further development. No school or college is too small to study the relevance of its objectives and program in general education to the students it serves; None is too large or well-established not to profit from this test of its mission as an educational institution. As the preceding discussion has suggested, certain of the problems confronting American colleges can never be solved except through concerted study in many different places. Out of the welter of evidence and counterevidence — of the continuing experiment and soul-searching analysis which evaluation requires — a larger and more dynamic concept of general education should emerge.

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CHAPTER XIII

ORGANIZATION AND ADMINISTRATION OF GENERAL EDUCATION

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THE PROBLEMS OF ADMINISTRATION IN GENERAL EDUCATION

If the functions of general education were clear, if their place in the total framework of the college or university were firmly established, and if this relationship between function and structure were an expression of common agreement among faculties, then there would be little point to a chapter on administration in this yearbook. It is chiefly because there is relatively little consensus about these matters that a discussion of administration is pertinent. For what are, really, the major problems of administration in general education? They are, first, the problems of clarifying function and purpose. Second, there are the problems involved in finding an organizational framework, or structure, which appropriately serves the purposes intended. This second set of problems has two facets: the organization of knowledge and experience, and the relationship between the structure for the general-education program and the total structure of the college or university. They are, third, the problems attendant upon the process of change, the dynamics of human relationship which lead to the modification of behavior; for, in the last analysis, changes in curriculums, organization, and structure presuppose predictable changes in the behavior of people.

Our discussion of these problems begins with a series of analyses — historical, philosophical, psychological, and sociological — and then

turns to an examination of current patterns of administrative organization in their relationship to these analyses.

THE RELATION BETWEEN STRUCTURE AND FUNCTION

When we state the general principle that administration is a means of facilitating the achievement of educational goals or purposes, we are explicitly acknowledging the belief that a harmonious and effective relationship between structure and function must prevail. The virtues and weaknesses of organizational patterns and structures must be assessed, in part, by reference to the purposes they are supposed to facilitate.

Consider, for example, the functions or purposes of education in the system which Taylor ascribes to the rationalist philosophy. One would expect to find here a structure characterized by a fixed curriculum pattern, a logical organization of subject matter, a dialectic method of teaching, and prescriptive planning at the top level, that is, by the experts or philosophers. Since there is a hierarchy of values among subject areas, only those of greatest value would be included in the general-education program. Since values themselves are derived from philosophy and theology and not from science, the courses in philosophy would be the capstone of the program. Since man's uniqueness as man derives from his rationality, it follows that the chief task of the educational program is to develop the rational powers — hence courses in logic and mathematics to train the powers of analysis. Since intellectual skills are the desired products of education, comprehensive paper-and-pencil tests can be taken whenever the student feels prepared, as at Chicago; and the Bachelor's degree can be received as well at age fifteen as at age twenty-one.

In the eclectic or neo-humanist view of education one would expect to find, structurally, a divisional organization of subject matter, with co-ordination by committees, the use of more varied methods of teaching, the existence of limited electives within a broad pattern, and general planning of the program by the staff through the techniques of consensus and compromise. The emphasis on a particular philosophy drops out in favor of an eclectic view of Western traditions. Values are derived from the literary and humanistic studies, however, and these are therefore stressed. Science is concerned with facts rather than values.

In the instrumentalist view one could expect to find, structurally, a flexible pattern of courses, a psychological organization of subject matter, individualized methods of teaching, and wide staff-and-student

participation in planning. The distinction between curriculum and extracurriculum would be minimized. The social and natural sciences, being just as much concerned with values as is philosophy, would tend to have a strong position. Evaluation would be concerned with personal development and maturity rather than being limited to the testing of intellectual attainments.

In practice, of course, one finds great variability. Junior colleges, large liberal-arts colleges, and liberal-arts programs which serve other colleges in a large university tend to have the greatest variety of purposes and also the greatest variety of organizational structures. Places where the most consistency of purpose is apparent and where the organization appears most clear cut are usually the ones which are most independent and which have been working longest at the problem of relating function and structure — such as Stephens, Minnesota's General College, Sarah Lawrence, and the College at the University of Chicago. Such programs are the exceptions to the general rule of variability.¹

RISE OF DEPARTMENTAL STRUCTURE

A brief historical sketch will reveal that the organizational and administrative problems of general education as we face them today are of very recent origin. As we explore the organizational patterns in liberal-arts colleges, both small and large, we see that almost universally in American colleges and universities at the present time instruction is organized departmentally. The notable exceptions to this pattern are more influential than their small numbers would suggest. And it is significant that the exceptions are found chiefly in those institutions which have been most active in their concern about general education. But let us look first at the dominant pattern in historical perspective.

The organization of knowledge and instruction by departments is a recent historical event. In Athens, at the height of her civilization in the fifth century B.C., young students sought instruction from the wise men of the day. And the wise man instructed the students in all the knowledge which he possessed. Even after Plato's notion of a fixed course of study, the wise man was the instructor for all the "courses." Following the same practice when the medieval universities were established, the instructors taught all of the subjects. Indeed, in America from the founding of Harvard in 1636 to the reform of Harvard's in-

¹See *Organization and Administration of General Education*. Edited by W. Hugh Stickler. Dubuque, Iowa: William C. Brown Co., 1951.

struction in 1767, education was given by the "generalist," and the range of his instruction embraced the seven liberal arts and the modifications of them which had occurred over the centuries. A convenient date for marking a new direction in higher education is the year 1767, when the overseers of Harvard voted to change the tutorial system so that each tutor would teach only a few subjects instead of teaching all subjects to one class. Thus, we have an explicit acknowledgment of specialization, through a major change in administrative organization. We are all familiar with the phenomenal expansion of specialization in the past 185 years, but it is important to see that this development is really a modern one in the light of 2400 years of Western history from fifth-century (B.C.) Athens to, roughly, the American Revolution.

Broadly, the shift to specialization was a consequence of the revolutionary changes in man's thinking, knowledge, and mores which occurred chiefly in the seventeenth and eighteenth centuries and have continued to the present day. Before this time, scholars were concerned with absorbing the knowledge of Greek and Roman civilizations into the doctrines and world view of the church. But it was secular rather than clerical knowledge which was the intellectual focus of the new age of scientific investigation.

In our own country, the early colleges were patterned largely after English models, as Harvard was patterned after Cambridge. Established by denominational groups, the colleges were islands of culture and Christian virtue in a harsh pioneering society — providing training for the clergy and general education in the seven liberal arts of grammar, rhetoric, logic, arithmetic, geometry, astronomy, and music. There were minor variations, of course, but the pattern was clear. Not until America's business, industrial, and technical society had advanced much further did there occur at a really rapid pace the firm establishment of specialization, departmentalization, practical studies, research, and free election — marked by the Land-Grant Act in 1862, the founding of Johns Hopkins in 1876, and the influence of Eliot at Harvard in the latter half of the nineteenth century.²

It can be said, with tolerable fairness, that specialization and departmental organization arose naturally and strongly for two basic reasons: because it was *en rapport* with the social, economic, and scientific trend of the times; and because its aims were specific and practical and urgent to a degree which put the aristocratic liberal arts on the defensive. The elective principle was a powerful administrative de-

² See Abraham Flexner, *Universities: American, English, German* (New York: Oxford University Press, 1930); and R. Freeman Butts, *The College Charts Its Course* (New York: McGraw-Hill Book Co., 1939).

vice for supporting the trend toward specialization. The departmental organization was a functional structure for containing and promoting the new knowledge which was being developed through specialization and research.

NEED FOR NEW STRUCTURES

We have been witnessing, especially in the past two generations, a breaking-up of the near monopoly of departmental organization on the structure of higher education. In a large part, this break-up is attributable to the vigor and the needs of general education.

There is a paradox here: Our vast new knowledge and technology resulted largely from specialized study and research; but the problems thereby created are broad and inclusive problems of human relations, human welfare, management, values, and integration which are not likely to be solved by more of the same kind of specialization and research. Indeed, the new interest of research people themselves in interdisciplinary studies is partly a recognition that many basic and important problems cannot be attacked to best advantage by the economist as economist, the psychologist as psychologist, or the physicist as physicist. This broader interest at the research level is a parallel development to the search for new integrations of knowledge at the level of undergraduate instruction.

Beyond these broad factors of historical consequence for the development and organization of general education, two other items may be noted briefly. One is the factor of steadily increasing enrolments in higher education. In general, the number of young people attending colleges and universities has approximately doubled every generation for the past hundred years. The rate of acceleration has been fairly constant. This growth has been both a reflection of and influence upon greater diversity in curriculum. Now, however, it is also a complicating factor in the search for broad patterns of general education. The second is the emphasis³ found in nearly all published statements of objectives of general education upon a behavioral rather than a static phraseology — that is, objectives are commonly described in language which indicates the changes in students' behavior which are sought.³ This is a development which comes largely from the fields of psychol-

³ Notable examples may be found in the Report of the President's Commission on Higher Education, *Higher Education for American Democracy*, (New York: Harper & Bros., 1949); Executive Committee of the Co-operative Study in General Education, *Co-operation in General Education* (Washington: American Council on Education, 1947); Ruth E. Eckert, *Outcomes of General Education* (Minneapolis: University of Minnesota Press, 1943); *A Design for General Education* (Washington: American Council on Education, 1944).

ogy and educational research and measurement; and these are, historically, new fields. Older expressions such as "a trained mind" are gradually dropping out of the vocabulary of educational goals, replaced by statements which suggest more clearly what a person does and how he behaves. It is particularly notable that the objectives phrased in this newer language have only a slight correspondence, and sometimes none, to the familiar "subjects" found in departmental curricula.

We have tried to suggest in the foregoing discussion that the job description of the "generally educated" man in our times is gradually becoming clearer. Perhaps this emerging job description cannot and should not get much more specific; for most educators agree that uniformity is not a desired goal. But clarifying the job description of the product is one approach to clarifying the purposes and functions of the program. And whatever new structures emerge will emerge in relation to functions which are not now well enough served by existing structures.

One of the problems of structure for general education is that of exploring combinations of knowledge different from those commonly found in departmental courses. We have suggested that the organizations of knowledge which are familiar to us in departmental courses are organizations which developed historically to serve the function of specialization. Not only are broader organizations of knowledge needed for the functions of general education, but some kind of broader administrative structure which permits these functions to develop freely and without conflict or competition against proper and important departmental functions is also needed.

We have also implied that the functions of general education are not, philosophically and ideally, confined to any one horizontal segment of college experience — such as the first two years. One can, of course, define its functions in a way which makes reasonable a two-year structure. But general education has its parallel at the level of graduate study and research, with the increasing importance of "interdisciplinary" studies, "interdepartmental" programs, "area" studies, etc. The connotation of these words is perhaps a compromise rather than a new synthesis; but the words do imply that existing patterns of organization may not be suitable for the newer purposes, even at the graduate level and the level of search for new knowledge. The two-year pattern of general education, therefore, provides a functional organi-

zation for one part of the problem and leaves the other part relatively untouched.

THE PROCESS OF CHANGE

It is perhaps apparent from the discussion so far that the administrative problems of general education—that is, the development of a structure for such programs—involve vastly more than simply introducing some new courses into the curriculum or revising a few old ones or modifying some of the catalogue requirements. Frequently, for both professor and administrator, general education means re-education. This, in turn, means a consideration of the process of change itself. It is, after all, the faculty, each as an individual, who must design the courses, teach them with enthusiasm, and advise the students. The interest and motivation of the staff are thus determining factors in producing change; and apathy or resistance can block change. An understanding of the dynamics of behavior and of social change is, therefore, basic to administration.

It would be taking on a task far greater than we could perform, and indeed greater than the available literature in the behavioral sciences makes possible, to attempt to set forth the generalizations which would lead to such an understanding. The problem is so germane, however, that it does not suffice merely to assert its importance. At least a brief discussion seems appropriate.⁴

For the past two decades psychologists and some of the other social scientists have been conducting experimental studies of and theorizing about group dynamics and the problems of re-education. Educators (and they, too, are social scientists) have also been giving considerable attention to them. Some of the thinking among educators which had gone on during the decade of the 1930's is reflected in the reports of the Eight-Year Study,⁵ the Co-operative Study of General Education,⁶ the evaluation and curriculum studies at the University of Minnesota's General College,⁷ and, in the early 1940's, the series of reports

⁴ See chap. xiv for further discussion of this topic.

⁵ Eugene R. Smith and Ralph W. Tyler, *Appraising and Recording Student Progress*. New York: Harper & Bros., 1942.

⁶ The Executive Committee of the Co-operative Study in General Education, *Co-operation in General Education*. Washington: American Council on Education, 1947.

⁷ Ruth E. Eckert, *Outcomes of General Education*. Minneapolis: University of Minnesota Press, 1943.

from the studies sponsored by the Commission on Teacher Education.⁸

All of these works reflect, in varying degrees, a concern with the procedures, the ways of working together, which seemed to be most conducive to change. All of them reflect a recognition of the fact that one cannot design new programs or chart new directions in some central staff, describe these persuasively, and then expect rational human beings to accept them and to follow the directions charted. Personal involvement in the process of building the new design is essential for acceptance of it. Group activities are important. A feeling of association with something larger than the local problem is important. Participation in conducting surveys and in interpreting their results is important. A sense of personal security and the assurance of freedom from threats to one's status is important.

Notice, for example, some of the observations by Prall and Cushman about conditions which facilitated change among the many schools and school systems with which they worked in the studies of the Commission on Teacher Education.

1. The most successful activities grew out of relatively specific needs concerned with the teacher's job, rather than out of abstract concepts of the good school or the good teacher.
2. A focus on the teacher's interest in his job was more conducive to change than a focus on the teacher as an individual who needs to improve.
3. It is important for people to work on tasks which seem important to them and on which they can make a positive contribution.
4. Flexibility of group activity is better than fixed patterns of organization.
5. People must be free to work as equals.
6. The means for converting thought into action must be reasonably easy and continuous.
7. Rich associations should be developed between the teachers and the community.
8. Rich associations should be developed between the teachers and important social ideas and ideals.

The development of the concept of evaluation as a supplement to the narrower idea of measurement in education is likewise a result, in part, of the observation that the way in which measurement and research is conducted is not unrelated to the use which is made of

⁸ Maurice E. Troyer and C. Robert Pace, *Evaluation in Teacher Education* (Washington: American Council on Education, 1944); Charles Edward Prall and C. Leslie Cushman, *Teacher Education in Service* (Washington: American Council on Education, 1944); Commission on Teacher Education, *The Improvement of Teacher Education*. Washington: American Council on Education, 1946.

whatever results are obtained.⁹ Thus, evaluation is regarded as having a purpose—to produce change. And thus evaluators have discovered that how evaluation is conducted is important—those who have a stake in it need to participate in its planning, its analysis, and its interpretation.

This same observation is being made repeatedly by those who are concerned with what is now often called action research. Lewin, for example, noted that “the extent to which social research is translated into social action depends on the degree to which those who carry out this action are made a part of the fact-finding on which the action is to be based.”¹⁰ The generalization is surely confirmed by those who have observed faculties and administrators at many schools gather data about their own institutions, hire consultants and speakers, send selected staff members to workshops, and engage in a variety of other activities from which they hope will emerge new local programs of general education.

Psychologists who have been studying group dynamics have noted that resistance to change is likely to occur when change is seen as a threat (because of lack of information or because of fears), as a creator of conflict in loyalties, or as a situation which does not involve the individual's own motivation.¹¹

A conflict in loyalties often occurs between the desire to maintain one's departmental home and one's interest in general education which is nondepartmental. The fact that many colleges have not yet created an administrative structure for general education is one of the obstacles to more rapid development of general-education programs; for the instructor must loosen his departmental ties and drift, more or less unattached, in a very nebulous sea. Indeed, unless there is a group identified as being primarily concerned with general education, a group which permits the development of loyalties and a feeling of belongingness, the probability of change is greatly reduced. For people come to accept new values and beliefs and to follow new lines of action, to a significant degree, by accepting membership in a group. The process of change is not so much that of getting people to accept

⁹ Troyer and Pace, *op. cit.*; Smith and Tyler, *op. cit.*

¹⁰ Kurt Lewin, “Conduct, Knowledge, and Acceptance of New Values,” *Journal of Social Issues*, December, 1945.

¹¹ Alvin Zander, “The Problem of Resistance in Creating Social Change.” Paper presented at meeting of the American Society for Public Administration, Washington, D.C., March 11, 1949; see also, Kurt Lewin, “Frontiers in Group Dynamics,” *Human Relations*, I, (1947), 5-41.

new ideas one by one, rationally, as that of accepting membership in a group; and often the latter must precede the former.

Allport points out a related principle when he says that people cannot be taught who feel that they are at the same time being attacked.¹² Perhaps this is another way of saying that the acceptance of new facts, values, and actions "can be achieved best through [their] discovery by the group members themselves . . . [for] frequently only then do the facts become really their facts (as against other people's facts)." ¹³

Let it be said emphatically that the administrator cannot successfully manipulate, or short circuit, or force, this process of change. The reason this is so lies in the fact that value systems and beliefs are deeply personal, embedded in the structure of personality; and it is the individual himself who accepts or rejects new values and new roles. The administration can, however, help to create some of the conditions which will encourage change. One of these conditions is the establishment of a general-education group, officially recognized, through which members can develop loyalties, common activities, and a vitally necessary *esprit de corps*.

Somewhere in dealing with the problems of administration and organization it becomes necessary to lay aside one's interest in formal structure, organization charts, and lines of authority, and think in terms of personal development, interpersonal relationships, and inter-group relationships. Katz expresses it in these words, "At some point in our group organization we must rely upon human beings and not upon formalized procedures." ¹⁴

Faculty committees may explore the problems of general education, engage in fact-finding studies on their own campus, visit other colleges, read widely, prepare new courses for review by the University Senate or some other official body — and all these are desirable and even necessary activities. Nevertheless, what results from such activity will depend largely upon the personal values and commitments of individual staff members and upon whether the administration is ready to help create new groupings and new organizations

¹² Gordon Allport, "Psychology of Participation," *Psychological Review*, LIII (May, 1945), 117-32.

¹³ Kurt Lewin, "Conduct, Knowledge, and Acceptance of New Values," *op. cit.*

¹⁴ Daniel Katz, "Morale and Motivation in Industry." Paper presented at the Conference on Trends in Industrial Psychology, University of Pittsburgh, February 19, 1949.

around which emerging values and interests can find common support and nourishment.

This brief analysis of historical, philosophical, psychological, and sociological factors that have a direct bearing on the organization and administration of general education leads to a consideration of plans for the administrative organization that are evolving or are already in effect.

An examination of each of the several plans that have thus far evolved may aid in seeking their respective merits and limitations. For this purpose, consideration will be given to (a) plans for general education in public school systems, (b) plans for general education in independent junior colleges, (c) plans for general education in the liberal-arts colleges, (d) plans for general education in the universities.

GENERAL EDUCATION IN PUBLIC SCHOOL SYSTEMS

Since the beginning of the present century, our secondary schools have undergone a marked change in the formulation of their purposes, in the broadening of their curriculum offerings, and in the methods employed to evaluate achievement. These changes are described quite fully in a number of recent reports and yearbooks and therefore will not be discussed in any detail here. It should be noted for the purpose of this discussion, however, that the secondary schools, which in earlier decades of this century conceived their chief function to be the preparation of a selected group of students for college or for leadership in society, have now broadened their perspective to include the offering of education appropriate to the needs of all American youth. The expansion of formal education to include more years and more people was one of the major sociological trends cited by Havighurst in chapter iv. In line with this new conception of function has been the recognition of the need for a wide variety of learning activities; for developing general subjects in both the junior and the senior high schools, either through core courses or through the use of the problem approach without regard to subject-matter boundaries; and for the evaluation of achievement in terms of behavior, attitudes, and understandings rather than in terms of knowledge of subject matter alone. These developments represent a growing recognition of the instrumentalist point of view described by Taylor in chapter ii.

For higher education one of the most important developments has been the upward extension of secondary education to include the

junior college. The establishment of this new educational unit represents an effort to bring the advantages of post-secondary education to many qualified youth who are not in a position to attend college away from home. This development is directly in line with our long-established public policy of extending to all citizens the opportunity to secure the education necessary to deal effectively with the problems of our democratic society. In its earlier stages the junior college was little more than a replica of the conventional Freshman and Sophomore college courses to which were added some vocational subjects. More recently, however, the courses offered in the junior colleges have been broadened and integrated so as to provide more adequately for general education. At the same time, more emphasis has been placed on the vocational and terminal functions of these institutions.

The place of the junior college in the prevailing structure of our public schools is far from clear. Some of the reasons for the difficulty in finding a satisfactory administrative setting are readily identified. They are (a) confusion as to whether the junior college represents an extension of secondary education or whether it is a part of higher education; (b) the lack of legal authority in some states to include the junior college in a tax-supported system of public education; and (c) special restrictions imposed by accrediting agencies or by colleges and universities.

That some progress is being made in the clarification of the function of the publicly supported junior college is indicated by the substitution of the community-college idea for the junior-college concept. This change represents a larger emphasis on the role of the college in the community with correspondingly greater provision for general and vocational education appropriate to the needs of the community. In effect, the transition which the junior college is currently undergoing is quite similar to the broadening of perspective and program that the high schools experienced in the past several decades. But this change in the nature and function of the junior college does not solve the problem of administrative organization. The very term "community college" implies an administrative unit distinct from the high school. With only a few exceptions, community colleges, or junior colleges, where they exist as a part of a local public school system, are organized and operated as distinct administrative units.

The lack of a legal basis for giving financial support to the junior college as a part of the system of public education has had an important effect on the organizational plans for junior colleges. Owing to legal restrictions, some junior colleges must be housed in plants

apart from public school buildings and must be supported by tuition. Here and there, with the tacit consent of boards of education and of taxpayers, public school buildings are used to house junior colleges in spite of legal restrictions. Generally, however, the result of this restriction is that the separate buildings and equipment for junior colleges which are maintained as adjuncts to public education are inferior to those that might be provided in the high-school plants. Consequently, worthy and competent students are often denied the advantages of post-secondary education of the type and quality to which they are entitled.

The fact that the junior college has usually been identified with higher, rather than with secondary, education has also opened the way for the imposition of requirements either by accrediting agencies or by colleges and universities to which students may transfer from the junior colleges for more advanced work. These requirements have also had an important effect on the nature of the administrative organization of the junior college. Apparently, some if not all of the regional accrediting associations have looked upon the junior college as a hybrid institution. They have, therefore, been slow to accredit this new type of educational program. In so far as regional associations have accredited junior colleges, they have applied criteria adapted to higher institutions of a different type, both in function and in organization. For example, the assignment of secondary-school teachers to junior-college courses has been frowned upon; the academic program has been evaluated in terms of its conformity to the conventional college curriculum; and the importance of vocational and terminal courses has been minimized. Moreover, the emphasis on separate accounting and on the maintenance of a separate administrative staff have given weight to the idea that the junior college is a distinct administrative unit, different and apart from the secondary school.

Another factor that has had considerable influence upon the administrative organization of the junior college has been the desire of some students to transfer to senior colleges and to universities for advanced study. For the purpose of effecting such a transfer without loss of credit, junior colleges have found themselves under considerable pressure to offer courses conforming to those given in the Freshman and Sophomore years of the senior colleges and universities. The junior colleges have, therefore, given more consideration to their role as colleges than to their function as institutions offering a sound program of general education combined with appropriate terminal courses.

The present status of the junior colleges that are attached to public schools may be briefly stated as follows: In terms of making educational advantages as widely available as possible, the junior college is an extension of secondary education, but in terms of the influences that have determined the pattern of administration, the junior college has evolved as a distinct educational unit. The prevailing administrative pattern of public education is still an eight-year elementary school, a four-year secondary school, and a two-year junior college.

There are, however, certain developments in the administration of junior colleges which represent exceptions to the foregoing conclusion and, therefore, are worthy of special note. These developments are essentially of four types. First, the inclusion of the junior college under the central administration of a public school system, even though it is organized as a separate educational unit. In this plan the financial support of the junior college is an integral part of the support and accounting of the school system. The administrative officer of the junior college unit is responsible to the superintendent of instruction of the school system and faculty members are appointed by the same procedures and on the same basis as are those appointed in the secondary school. Second, the organization of special junior-college districts by statutory authorization. Junior colleges thus established and publicly supported usually operate as independent two-year educational units. Third, the development of state-wide systems of higher education which include tax-supported junior colleges. Fourth, the integration of the last two years of high school and the two years of junior college into a single unit with a unified curriculum with support derived from public funds and administered as an integral part of a municipal school system. These developments, particularly the last one, may point the way to a pattern of administrative organization which will eventually be generally adopted.

THE INDEPENDENT JUNIOR COLLEGE

Historically, one of the important functions of independent schools and colleges has been to experiment with new educational ideas and to blaze a trail for new educational developments. The independent junior college has had a unique opportunity to give form and direction to general education. Its greatest contribution has been the promotion of the junior-college concept and a demonstration of the validity of a well-conceived program of general education. But as to the determination of the nature, scope, and content of general education, the con-

tribution of the independent junior colleges has been all too limited. They have operated under the same kinds of restriction that affected the junior colleges that are a part of public school systems: namely, the necessity of deriving their major support from tuition; the lack of clearly defined functions; the necessity of conforming to certain prescribed criteria for purposes of accreditation; and the need of conforming to curriculum patterns of liberal-arts colleges and universities to assure advanced standing to transfer students. Moreover, the independent junior colleges that have offered two years of post-high-school education have labored under the additional handicap of being separated both from the secondary schools and from the universities. They have, therefore, lacked the opportunity of experimenting with methods of integrating their programs with those of the secondary schools and have not been in a position to influence to any appreciable degree the kind of basic education that constitutes a sound foundation for later specialization. Furthermore, most independent junior colleges have adopted a policy of selective admission, thereby limiting their opportunities for the experimental development of programs adapted to a cosmopolitan student clientele.

But to conclude with these generalizations about the independent junior college would be quite unfair to those few institutions that have been truly experimental and have made some distinctive contribution either along the lines of administrative organization or in the development of a unique educational service. There is, for example, the independent junior college that has endeavored to define the content of its educational program in terms of student need, has made student guidance and counseling an integral part of its administrative organization, and has undertaken to evaluate the development of traits rather than merely to measure intellectual achievement. There are also among these independent junior colleges a few that have recognized the limits of a two-year unit and have expanded their scope to include four years, roughly the equivalent of Grades XI through XIV. Among them, one or two have gone further and have developed a unified program of general education that disregards the conventional Freshman and Sophomore course patterns and have introduced placement examinations to measure the educational achievement of students. Such developments, few though they be, provide grounds for the hope that the independent junior colleges may yet break loose from external controls and may play their role in interpreting the nature and place of general education.

In summary, the lack of clear-cut structures for most junior col-

leges, both public and independent, stems largely from the hybrid nature of the programs and is compounded by administrative precedents, legal difficulties, and the ambivalent influence of accrediting agencies. The gradual change of junior colleges into community colleges can perhaps be forecast; and with this clarification of function there may come greater clarification of administrative organization. The function of the community college is perhaps more in line with the instrumentalist philosophy of education than with the other philosophies mentioned by Taylor; and its role in society is in harmony with the political and economic trends described by Havighurst. One of the major administrative problems which the community college faces is that of effective articulation with secondary-school programs. It may be that this can be solved more readily by associating the administration of community colleges with the public school systems, where the special concerns of the locality are most evident, than by organizing them as part of a more remotely controlled system of higher education.

THE LIBERAL-ARTS COLLEGE

By and large, the liberal-arts colleges have subordinated their historical concept of liberal education to departmental specialization and preprofessional preparation. Specifically, the courses offered in the Freshman and Sophomore years are highly departmentalized and are introductory to more advanced departmental courses. As such, these introductory courses represent segments of specific disciplines with little or no emphasis on the interrelationship of these disciplines or the basic principles that underlie them. Even though one-third or more of the students entering the liberal-arts colleges as Freshmen do not proceed beyond the Sophomore year, most liberal-arts colleges still fail to provide a basic kind of general education appropriate to the needs of these students. Moreover, in too many instances the liberal-arts colleges have failed to recognize the function of so integrating the educational experience of students in the earlier years as to provide a sound basis of general education without reference to the field of specialization that the students may later enter.

Here again, it would be unfair to generalize without taking note of outstanding attempts to provide more adequately for general education within the structure of the liberal-arts programs. Some of the most significant developments are represented by such projects as the Co-operative Study of General Education, sponsored by the American Council on Education; the Co-operative Study of General Education

for Teachers in the Liberal-Arts Colleges, sponsored by the North Central Association of Colleges and Secondary Schools; and an increasing number of workshops in general education in which teachers in the liberal-arts colleges are active participants.

Some of the plans that are evolving for the provisions of general education in the liberal-arts colleges are of special importance. One is the introduction of the divisional plan of organization. In some instances the organization is vertical in nature; that is, it brings together courses in related subject-matter fields from the Freshman through the Senior year. A division of the sciences, for example, would include both the introductory and the advanced science courses. In other instances, the organization is horizontal, that is, a lower division includes the Freshman and Sophomore courses in various subject-matter fields, these courses ordinarily being broader in scope than those designed to be specifically introductory to more advanced specialization, and an upper division or divisions. The upper division may include all of the disciplines, or there may be several upper divisions, each combining related subjects. In either plan, each division is usually administered by a chairman or a head of the division. All stages of integration are found where these plans are in operation. Sometimes a departmental scheme continues within the respective divisions. In other instances, departments are abolished and department heads are replaced by divisional officers.

If one conceives of general education as the foundation for specialized study, or as a useful terminal education for those not qualified or otherwise able to pursue advanced studies, then the establishment of general-education programs in a horizontal lower-division structure would seem to be appropriate. If, on the other hand, one thinks of motivation for learning as arising in large part from students' interests in vocational or other special goals, a better opportunity to capitalize on these interests may be provided by the vertical or parallel plan of organization. In considering either plan, cognizance must be taken of the problem of articulating into college programs the previous experience of larger and larger numbers of students who may be entering from the junior college or community colleges.

Another approach to the problem of making more adequate provision for general education is the organization of interdepartmental committees. The function of an interdepartmental committee is usually to co-ordinate courses offered in the respective departments, to develop interdepartmental courses, and to set up fields of specialization that cut across departmental lines. Administratively, this approach

retains much more of the usual form of departmental organization than does the divisional plan. It has the advantage of leading the faculty to discover weaknesses in the conventional departmental pattern and to evolve gradually a plan of reorganization that will be accepted by the faculty with less resistance than frequently exists where the divisional plan is adopted by action of the administration.

Other plans for achieving some of the objectives of general education in the liberal-arts colleges relate more to the reorganization of subject-matter offerings, the planning of student programs, and the employment of special procedures for instruction or for measuring achievement than they do to a fundamental administrative reorganization. They include such provisions as independent reading courses, survey courses running throughout the four years of the college, integrating courses at the Senior level, programs planned for students on an individual basis, tutorial seminars, and honors methods of instruction, and the use of comprehensive examinations. There is much to be said for any plan that integrates and makes meaningful the student's educational experience throughout the four years of a liberal-arts college program. But it must be recognized that any such approach is adapted primarily to the interests and needs of students who survive the earlier years in college. It will, therefore, operate most effectively in an institution that is able to carry a large percentage of its entering students through to graduation.

Something further should be said about a few of the liberal-arts colleges which are experimenting with plans of individualized programs of study. The controlling philosophy of these institutions is that the student's program should be planned in terms of his particular interests and needs. It is rooted in the basic principles of instrumentalist philosophy and in the generalizations from research in the social sciences, particularly psychology. No attempt will be made to interpret these principles since they have been very well presented in recent publications. They are also discussed⁶ rather fully in other chapters of this yearbook. It should be noted, however, that the colleges which are committed to this educational philosophy are so organized that the functions of counseling, instruction, and extra-classroom activities are integrated administratively. It is not necessary, therefore, to find in these institutions a special structure for the organization and administration of general education.

GENERAL EDUCATION IN THE UNIVERSITIES

In so far as general education for liberal-arts students is concerned, the plans in the colleges of arts and sciences in the universities parallel

quite closely those found in the independent liberal-arts colleges. The real administrative problem in a university is how to fit general education into the multiple curriculums of professional schools, such as engineering, business administration, journalism, pharmacy, social work, home economics, and many others, which already have intensive four-year undergraduate programs.

The faculties of technical and professional schools ordinarily do not have members responsible for providing general education. Like departments, the history of professional schools has been one of striving for higher standards of specialization and technical competence. But, like other members of the academic community, there is today among the professional-school faculties a growing recognition of the need for general education. Less emphasis is being placed upon specific preprofessional courses and more concern is being expressed for a well-rounded general education as a foundation for professional work. Among independent technical schools there have been recent examples of affiliation with near-by liberal-arts colleges and universities to provide a combined general and technical program. Within universities there has been a tendency for professional schools to use the liberal-arts college as a service unit for general education — either by the technique of dual registration, or, more commonly, by the requirement of designated general-education courses.

One plan for providing general education for all students consists of a university-wide set of offerings which are required as a foundation for specialization either in the arts and sciences or in the professions. In this type of organization the program of general education is ordinarily two years in length covering the equivalent of the Freshman and Sophomore years. The curriculum of most of the professional schools to which students are admitted after completing this program of general education requires three additional years. That is, a student completing the professional curriculum reaches approximately the equivalent of a Master's degree, at least in terms of the time devoted to his education. The program of general education is ordinarily organized as a lower division or junior college administered by a dean or director. As a rule, the faculty is drawn from the departments or professional schools on a part-time basis, although in some institutions faculty members give their full time to teaching in the division of general education.

Most universities have found it impossible or impractical to adopt a university-wide program of general education and have set up such a program within the college of arts and science. Sometimes an associate dean or director of general studies is given responsibility for

building and co-ordinating this program. The courses in general education, of whatever type, are available to the professional schools on a basis mutually agreed upon. This plan, of course, gives less assurance than does the university-wide scheme that every student will get a general education as part of his university experience. On the other hand, it can provide more flexibility and adaptation to individual differences from the point of view of the professional-school student and faculty. The general-education offerings may be concentrated in the first two years or distributed over the four-year period. When the general-education program is spread over the four years (and some of it extending even into the graduate school) there inevitably arise many difficulties in planning co-operative schedules. Despite these difficulties, there may be an advantage in terms of students' motivation for learning to have general and special programs proceeding together. Students enrolled in the professional schools are ordinarily eager to pursue their vocational goals from the moment of their arrival on the campus. The requirement of large blocs of general-education courses prior to the professional courses has often been regarded by the students as an unwarranted obstacle. Also, those teachers who argue from the point of view of the psychology of learning and motivation feel that better conditions for effective learning can be maintained in both general and special subjects by letting students get started on courses directed toward their special interests in the first two years.

CONCLUDING STATEMENT

With the growing recognition of the need for general education, it has been necessary to devise and try out various patterns of organization and administration in the attempt to establish such a program securely in the larger structure of higher education. There appears to be broad agreement with respect to many of the goals of general education; but there is disagreement with respect to the manner of attaining them. The purposes of general education are being expressed more and more in functional terms; and as purposes become clarified it should be easier to determine how well they are served by existing structures or what new structures they may require. Because there is a great deal of diversity in the kinds of institution that are concerned with both general and special education, it is not surprising to find a corresponding diversity in the administrative organization of general education in these institutions.

In so far as there is broad agreement about the desired end-product

of general education, some of the differences among instrumentalist, eclectic, and rationalist philosophies become problems of means rather than ends. Moreover, when one is dealing with these problems in the practical setting of any given college or university, one always finds a variety of viewpoints represented by the constituents and never a solid front of commitment to any single philosophy. Each institution is, therefore, a mixture and cannot be neatly labeled as belonging to one group rather than another, except in the most general terms. Even specific practices may not be in every case clearly labeled as logically deduced from a given philosophy. Take, for example, the comprehensive examinations at Chicago. As a device for accommodating individual differences, letting students progress at their own rate, and encouraging independent study it should have the logical approval of instrumentalists; as a device which bases graduation solely on the student's possession of knowledge and intellectual skills and abilities it should have the logical approval of the rationalists. Thus, a given practice or administrative plan may be appropriate to more than one of the three philosophies.

The social, political, and cultural influences on the organization of general education may be seen most strongly at two points. One is the upward extension of educational opportunity for larger numbers of young people — a development for which the most functional structure may prove to be that of the community college, a college which is locally controlled, locally oriented in its program and services, and conceived as part of the public school system. Such a development, however, would create a strong set of influences at a second point — namely, the design and structure of liberal-arts colleges and universities.

The implications for administrative organization which can be derived from Corey's chapter on the Psychological Foundations of General Education (chapter iii) confronts us with an anomalous situation. If learning proceeds most effectively from interests possessed by students and goals perceived as meaningful by them, then the college and university programs of general education which are designed as foundations for advanced work would be less efficient than programs where general and special studies proceed together. This same problem exists when general-education programs are regarded as terminal. At Minnesota's General College, in the years when the entire program consisted of general courses, only one-fourth of the students remained for two years. After a parallel series of vocational courses was introduced, the number of students who remained for two

years rose to 40 per cent. Thus, the logical structure of two-year general-education programs, either terminal or foundational, which would seem to follow from the upward extension of education (whether in community colleges or four-year institutions) may have disadvantages; and, when this structure is followed, special means for meeting these possible disadvantages will need to be introduced.

There is no conclusive evidence from research or from the subjective appraisal of current practices to justify the acceptance of one plan of general education to the exclusion of all others. The more clearly the functions and concepts of general education are defined — philosophically, sociologically, and psychologically — the greater is the likelihood that satisfactory plans of organization and administration will emerge.

CHAPTER XIV

THE PREPARATION OF COLLEGE TEACHERS FOR GENERAL EDUCATION

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TEACHER INFLUENCE ON THE GENERAL-EDUCATION PROGRAM

The success of any type of general education will evidently depend in large measure on the behavior of its teachers. Grouped as faculties, these persons exercise a major influence in formulating institutional purposes, establishing policies, and determining the general nature of the various curriculums. Individually, or in some instances and to some degree as members of departments or special committees, they plan the content of particular courses, select the textbooks and other materials of instruction, and — through the exercise of such teaching methods as they may employ — guide the experiences whereby it is hoped that the students may learn. Each faculty member will, of course, be influenced to some extent by his colleagues, especially his department head, by the administrative officers and, more remotely, the trustees of the college at which he is employed, and by the student body. The traditions of the college and the character and expectations of its surrounding society will also have an impact. However, the faculty will ordinarily assume that the making of fundamental decisions respecting the educational program is its responsibility and will be jealous to protect that right.

Even when other persons — college presidents, for example — undertake to exercise special influence on the nature of general-education programs the success of their efforts must depend on the response of their faculties. Thus, men and women who have had the good fortune to provide the initial leadership for newly founded institutions have succeeded in realizing their educational hopes in propor-

tion to their skill in selecting teachers who were ready and able to do what was desired. Harper of Chicago, Foster of Reed, Leigh of Bennington, and Warren of Sarah Lawrence would be examples. Equally influential presidents who have taken over established colleges will usually be found to have been able to change the constitution of their faculties rapidly, either through expansion or through replacement: for example Capen of Buffalo, Morgan of Antioch, and Barr of St. John's. As negative evidence may be noted the failure of even so powerful a personality as Hutchins to obtain over twenty years at Chicago the complete program of general education of which, throughout, he was so vigorous and so untiring an advocate.

It follows, then, that both the character and quality of any program of general education will largely reflect the purposes of those who teach in it and their skill in achieving those purposes. But what a college teacher desires to accomplish and the equipment he has available for the service of that desire depend on his native endowments and the sum total of his experience. Within that experience — and a very significant element thereof — will customarily be elements that were intended to serve as preparation for teaching.¹ Without such special preparatory experience the individual would be unlikely to obtain a college teaching appointment. As a result of such experience, it must be assumed, his subsequent behavior as a teacher will be considerably affected and, thereby, the nature of the general education program in which he participates.

Let us consider what tasks a college teacher of general education may reasonably be expected to perform. The answer to this question will depend upon the type of general education envisaged, which will turn, as has been made abundantly clear in preceding chapters, upon issues of educational philosophy. When these matters have been clarified we may undertake an examination and appraisal of existing programs of teacher preparation, both the usual and the unusual, and conclude by considering what changes, if any, may be anticipated or recommended.

THE TASKS OF COLLEGE TEACHERS

The phrase, "college teacher," implies a primary responsibility for the conducting of classroom instruction. Traditionally, however, American professors have also been expected to be concerned with

¹ This is particularly true in the realm of general education, though a few exceptions must be recognized in the area of the arts. The larger number of exceptions in vocational-technical fields are not relevant to the present discussion.

research. Both of these functions have commonly been carried on quite individualistically, although recently instances of group teaching and group inquiry have more and more been observed. Such group contacts, of course, are essential in the performance of a third function assigned to some faculty members, that of administration — as, say, a department head or chairman or member of certain committees. The same is pre-eminently true of those activities in which every college teacher indulges in his fundamental capacity of faculty member, when, that is, he shares with his colleagues in considering, determining, and carrying out general institutional policies.

Both as classroom instructor and as faculty member, a college teacher, if he is to be fully effective, must have a clear and informed sense of purpose, must know what he desires to accomplish. Does he believe in general education at the college level for all American youth, or for the "upper" (in whatever sense) 50 per cent, or only for a smaller elite of, to him, unquestionable "college material"? Is he himself interested in working with students of the whole range of individuals whose admission to college he considers socially desirable, or would he prefer to specialize in teaching some particular segment of that range? Is his responsibility, as he sees it, limited to the promotion of individual intellectual powers, or is he also concerned with moral and emotional development, with growth in citizenship capacity and wise choice of vocation? Does he wish to limit his influence to promotion of factual knowledge and reasoning skills, or does he also wish to develop creative powers and bring about commitment to values? If the latter, is it his desire to make certain that students accept and express the values that he himself holds or, alternatively, to help them make up their own minds and hearts? Is he satisfied to teach his "own" courses or is he eager to help create and maintain a coherent program of general education? Unless an individual college teacher knows what his answers to such questions are, his behavior is likely to be erratic and ineffectual.

The Rationalist Orientation

Evidently philosophical differences will very fundamentally affect the choice of purposes by college teachers. The rationalists believe that certainty is attainable; that absolute values exist; that the cultivation of reason is the sole purpose of general education; that, if such cultivation is successful, right behavior may be counted on automatically to occur; and that while all human beings are, as such, rational, their capacities in this regard vary widely and hence cannot in many instances be developed to the degree requisite for college work.

Teachers in a program of general education committed to such views should, of course, share them. They should be eager to work exclusively with students capable of abstract thinking, to concentrate their efforts on the cultivation of intellectual powers, to help students to discover and accept the absolute truths in which they themselves believe, to work in concert with their colleagues to achieve a program of general education calculated in part or in whole to accomplish such results. There can be no place in a college fully dedicated to the rationalist view for teachers who do not share it and know how to act upon it.

The leaders and admirers of St. John's, a prime example of the expression of rationalism, have understood this perfectly. To be sure, they have viewed the authors of the Great Books as the true teachers and have assigned to the living members of the St. John's faculty the role of being merely "auxiliary intermediaries." But they have not underestimated the importance of these latter persons. Their task is that of "assisting discovery to take place."² To do this, they must respect both the students and their subjects. They must also command respect, by reason of their competence in the liberal arts, in their "search for the fundamental questions to be asked,"³ and in the thinking they display in their unending quest for answers to those questions. But while they must possess authority, in such a sense, it must be the authority of example and not of position. "The desire of the true teacher is not to triumph but to teach, and in teaching to learn."⁴ "The teacher is successful at the moment when his student becomes original."⁵ Such originality — such discovery — may not be great; it will probably not be original at all in the sense that no one else has ever made the same discovery before; but it shows the student thinking for himself and may occasionally be a revelation to his teacher who thus, for the moment, becomes the taught. If the discovery is important it will be because, through good thinking, it increases the grasp of truth. At this point it is essential to recall that to the rationalists "the truth is everywhere the same," from which they infer that "education should be everywhere the same."⁶

² Mark Van Doren, *Liberal Education*, p. 173. New York: Henry Holt & Co., 1943.

³ *Ibid.*, p. 176.

⁴ *Ibid.*, p. 172.

⁵ *Ibid.*, p. 175.

⁶ Robert M. Hutchins: *The Higher Learning in America*, p. 66. New Haven, Connecticut: Yale University Press, 1936.

What Instrumentalism Implies

Instrumentalism also implies purposes for teachers of general education. For the instrumentalist the establishment of degrees of probability is all that can be hoped for as a consequence of human inquiry; no absolute truths are demonstrable; man is an integrated, growing, social organism in whom reason and emotion are of co-ordinate significance, being indeed inextricably interlinked; the free, spontaneous growth of all persons in society is the supreme good; the function of education is to arrange an environment conducive to the full development of all potentialities of each socially-related individual; and the test of that education is the consequent behavior of those who have been the object of teaching effort. Teachers of general education in an institution so oriented philosophically should, evidently, share the same convictions. They should welcome the opportunity to work with any young American to whose personal development they are capable of making worth-while contributions, to cultivate emotional, social, and even vocational as well as intellectual potentialities, to promote capacity to analyze and evaluate experience and share effectively in the ongoing social process of value-establishment, and to cooperate with fellow-teachers in the creation and re-creation of a general-education program consistent with instrumentalist beliefs. They should be concerned that that program be related to the needs and problems of contemporary youth and contemporary society and lead to behavior that will satisfy such needs and solve such problems.

Such teachers may, however, vary widely in individual backgrounds, opinions, and capacities. Their individual differences will be acceptable provided there is readiness to agree with the basic implications of the philosophy. Thus, debate, as to what is true and what is good will be usual, acceptable, and indeed essential within the faculty. Thus, also, individual differences among teachers will be respected, differences relating not only to subjects to be taught but also to types of students with whom communication can best be established and to skill in counseling as contrasted with teaching in the usual sense. Some may be most at home with books, others with the concrete realities that the books are concerned with. But each will respect the tasks of the others, as he respects his own task and the students who are a common concern.

These teachers of instrumentalist persuasion will be no less dedicated than their rationalist brethren to raising fundamental questions and assisting discovery to take place. They will wish to promote good

thinking. But their empiricism will lead them to emphasize the importance of combining observation and participation with reading and speculation. And what is to be observed and participated in will be contemporary life — real life so far as possible, not a life specially arranged for the undergraduate. The sensitivity of teachers of instrumentalist views to the emotional component in man's nature will result in their stressing aesthetic creativity as well as theoretic achievement. Their convictions as to the sources of belief will cause them to emphasize the usefulness of the psychological and social sciences. And they will rely on group methods to enable individuals to achieve working value-hypotheses without any notion that these can, by processes of reason, be demonstrated to be certainly true.

The Neo-humanist Picture

It is more difficult to characterize the teachers who will be suited to a neo-humanist program of general education. The majority of colleges fit in this category, suggesting that such programs can make use of — or, perhaps more correctly, are the consequences of — teachers who are not particularly homogeneous as to convictions and purposes. To be sure, any primary devotion to vocational preparation will be a handicap, but, since general education by definition emphasizes the nonvocational, this issue is, practically speaking, unlikely to prove serious. The neo-humanist teachers of general education will probably prefer to serve in some college of liberal arts which has not yet openly accepted responsibility for preparing for other than the learned professions — and perhaps does not even admit that that involves vocationalism. Or they may be reasonably happy in an institution where general and vocational studies are viewed as quite distinct and are separately organized. In general, their purposes and behavior are likely to be similar to those of the rationalist teachers, but they will be less certain of their ground, more variant in their convictions, and somewhat more tolerant of colleagues whose views deviate from their own.

Teachers suited to neo-humanist programs of general education will prefer students who are intellectually gifted. While aware of the impacts of emotion upon student behavior they will be distrustful of emotion and seek to promote its strict control through knowledge and reason. They will have profound faith in the virtues of subject matter, systematically organized and systematically presented, as the means of accomplishing what they consider the fundamental ends of general education. They will expect, and be expected, to be experts — which in effect means specialists — in some such subject matter. Work-

ing in general education they will find it difficult to select the elements of their specialty which at a minimum should be transmitted to their students. Thus, though they will recognize the claim of other subjects than their own to inclusion in a general-education program, they will feel a sense of continual competition with their fellow-specialists for an adequate place in the general education sun. Accepting the idea that integration of knowledge is desirable, they will nevertheless find it difficult to work in harness with their colleagues in other areas and will be inclined to leave to the student the task of fitting together meaningfully all that he has learned.

It is safe to say that the preparatory experiences customarily had by college teachers today are more calculated to produce an individual of the neo-humanist than of either other type. These experiences, beginning in the undergraduate college and culminating in the graduate school, emphasize command of subject matter and of the tools of research. It is, indeed, upon preparation for the carrying out of research that attention is almost completely concentrated during the college teacher's training period. Of key importance for understanding this situation is the degree of Doctor of Philosophy and the requirements therefor.

PH.D. PROGRAMS AS TEACHER PREPARATION

The Ph.D. degree, German in origin, became important in American higher education only following the founding of Johns Hopkins in 1876. Early ideas as to the experience and accomplishment essential to the earning of the degree naturally varied. But from the outset the assumption was "that the purpose of the degree program was to train individuals who would either devote themselves to research directly, or who would combine individual study of an advanced character with the training of other research workers under university auspices."⁷ This purpose remained dominant as requirements were approximately standardized during the first quarter of the present century.

The fact is that those responsible for the development of Ph.D. programs in American universities did not, at the beginning nor until long after the character of the degree had been firmly established, think of it as necessary or even important for teachers of college undergraduates. The rise of this notion was the consequence of pressures generated by the philanthropic foundations and the regional accrediting associations. The former in connection with their pension pro-

⁷ Ernest V. Hollis, *Toward Improving Ph.D. Programs*, p. 27. Washington: American Council on Education, 1945.

grams and the latter as one aspect of their efforts to measure institutional quality began, around 1905, to count the proportion of Ph.D.'s on college faculties. Since foundation and accrediting-association approval was important to them, the colleges now began to give preference, when appointments were made, to holders of a Doctor's degree. The inevitable consequence was a rapid increase in the numbers of those seeking such a degree. A growing proportion of these individuals was now primarily interested, not in research, but in college teaching. The Ph.D. programs, however, under the control of the graduate-school faculties, continued to operate according to the assumptions upon which they had originally been established.

Yet the graduate schools did not refuse to admit — and grant Doctor's degrees to — ever-increasing numbers of students. In 1918 American universities awarded a total of only 562 Ph.D.'s. By 1924 the number had risen to 1,064, and by 1941 to 3,526.⁸ In 1950, American colleges and universities granted 6,633 Doctor's degrees — the vast majority Ph.D.'s.⁹ It is safe to say that in the last twenty-two years production has increased at least 1,100 per cent. Moreover, it is to be expected that "during the next three years the number of graduate [including Doctor's] degrees will increase markedly."¹⁰

Nearly all of these Ph.D. degree-holders, as has been remarked, have been trained exclusively for research, usually in some particular area of some recognized subject-matter field — English, history, or physics, for example. Customarily building on an undergraduate major, they have taken nearly all of their graduate courses in the same field, with the remainder in some subject or subjects intimately related to it. They have developed a reading knowledge of two foreign languages on the assumption that there was a literature in those tongues, acquaintance with which was essential to research in their specialties. They have composed dissertations attested by their instructors to constitute original contributions to knowledge. And they have passed various examinations, culminating in an oral defense of their research findings. They have finally, by the award of the Ph.D. degree, been declared fitted for a career of research scholarship.

And then what have they done? A study by E. V. Hollis has provided the answer to this question for the 22,509 Doctors of Philosophy

⁸ *Ibid.*, p. 30.

⁹ *Earned Degrees Conferred by Higher Educational Institutions, 1949-50*, p. vii. Federal Security Agency, Office of Education Circular No. 282. Washington: Government Printing Office, 1950.

¹⁰ *Ibid.*

produced by 94 universities during the decade of the thirties.¹¹ In September 1940, 60 per cent of these persons were found to be employed by colleges and universities, 6 per cent by other educational agencies, and 27 per cent by nonacademic agencies. The remainder were either not gainfully employed or had dropped out of sight. When the 20,783 actually employed were studied from another angle it was found that 55 per cent were engaged in teaching, 31 per cent in research, 10 per cent in administration, and 4 per cent in other activities. The proportion occupied with teaching varied widely from specialty to specialty. Thus, it was below the average in the case of most natural scientists, ranged from the average to 82 per cent for the social scientists, and from 70 to 91 per cent for those trained in philosophy, the arts, literature, and languages; mathematics was high at the 88 per cent level. The median percentage for specialists in fields related to general education was 67.

Rationalist Dissatisfaction

The question may now be asked: How and to what extent may the products of the Ph.D. process be said to have been prepared to teach in programs of general education? Any effort to answer this question must carry us back to a consideration of major philosophical differences. The process certainly cannot be considered particularly suitable for prospective teachers in a rationalist type of general education. This has been made perfectly clear by St. John's. To be sure, at that college "each of the faculty members has to be expertly competent in at least one field of knowledge, [but] beyond that he must be willing to acquire a certain expertness in other fields . . . hitherto neglected by him, and a certain competence in the liberal arts. That means that he has to re-educate himself."¹² Specialism, of the sort to the encouragement of which Ph.D. programs are customarily devoted, is not desired. The research explicitly wished from St. John's faculty members is translation and reinterpretation of the Great Books. "The products of this kind of research go first into teaching. Production for publication and learned societies is and should be a secondary result."¹³

It is significant, in this connection, that the proportion of St. John's faculty members with a Doctor's degree fell from 54 per cent in 1937, just before the Great Books program was introduced, to 38 per cent in

¹¹ Hollis, *op. cit.* The figures about to be presented are derived from tables in chapters ii and iii.

¹² *Bulletin of St. John's College, Catalogue Issue, 1950, Vol. II, No. 1, p. 39.*

¹³ *Ibid.*, p. 40.

1949, while the number with no degree higher than the Bachelor's rose from none to 22 per cent of the faculty members. Only four of the 1936-37 faculty were still on the staff thirteen years later; of these, three held Master's degrees and the fourth an Oxford D.Phil. The Ph.D.'s of several faculty members were European. Four of the staff were St. John's graduates, only one having proceeded beyond the B.A., and he to a Ph.L. — not an American degree.

Further light on the rationalist attitude may be found in the memoirs of John Erskine, who is generally credited with having fathered the Great Books approach to general education in the United States. Erskine lampoons the Ph.D. process mercilessly. "Teaching," he declares, "is an art, and professors should have some training in it."¹⁴ What he proposes "for teachers of literature, and perhaps all teachers in the humanities" is an undergraduate and first-year graduate experience devoted to wide reading, under guidance, of the literature of every important country, East and West, followed by a sixth year of "teaching, under the observation and direction of the professors who have trained them." At the end of that last year "another diploma might be given to those who have convinced both their professors and their students that they can teach. But the diploma will probably not be needed. A good teacher is so rare that the rumor of him spreads with the speed of scandal."¹⁵

Instrumentalist Dissent

The instrumentalist group in general education is also dissatisfied with the usual Ph.D. process. President Harold Taylor of Sarah Lawrence makes this clear enough in the following passage:

The scholars and scientists, busy with their own private researches, arrange themselves in hierarchies of rank, so that those with the highest rank and the greatest number of books or pamphlets printed can give the least number of hours to the students. A body of knowledge, approved by committees, is then transmitted as a direct transaction³ from teachers to pupils. As in the thirteenth century, a text, or printed manuscript, is presented. A person trained in academic custom, whose blood has been drained away by the ordeal of the Ph.D., either gives comments upon the text or repeats the text as a lecture. The students record the salient points under numbered headings, and report the information back when asked.¹⁶

¹⁴ John Erskine, *My Life as a Teacher*, p. 183. Philadelphia: J. B. Lippincott Co., 1948.

¹⁵ *Ibid.*, pp. 183-84.

¹⁶ Harold Taylor (editor), *Essays in Teaching*, p. 16. New York: Harper & Bros., 1950.

It is evident that those who are committed to a program of general education that is concerned with individual growth (moral and emotional as well as intellectual), with social issues, with knowledge for use, and with faculty co-operation in the creation of an over-all plan of education must be critical of the experiences and requirements ordinarily associated with the Ph.D. degree. For these experiences and requirements are not calculated — whatever their positive virtues — to sensitize prospective college teachers to the wide range of adolescent needs, to develop an understanding of those needs and of how to help in meeting them, to assure examination of educational issues and the formulation of systematically thought-out educational convictions, to provide apprentice opportunities in teaching, to develop skill in the evaluation of student progress, and to promote breadth of knowledge and insight. "Obviously a chemistry teacher must be a good scientist," Dean Esther Raushenbush of Sarah Lawrence writes, "or he cannot be a good chemistry teacher; and a teacher of literature must be widely read and have imagination and insight into the meaning of literature or he is a poor teacher of literature. But there has been so much pressure for graduate students who are to become college teachers to embrace a corner of the knowledge of their fields and possess it completely that we sometimes forget that the college teacher should be an educated man."¹⁷

An analysis of the Sarah Lawrence faculty for 1950-51 shows that less than one-third — 31 per cent, to be exact — are endowed with Doctor's degrees, one out of five of these being from European universities. About the same proportion — 30 per cent — hold Master's degrees or (almost one-fifth, again) European degrees of approximately that level. Of the remaining 39 per cent, two-thirds hold the A.B. or a similar degree, and one-third are the products of nondegree-granting schools of music, art, or architecture. The conclusion is clear. By action as well as by word, outstanding instrumentalists as well as outstanding rationalists reveal their dissatisfaction with the Ph.D. process as a means of preparing teachers for college programs of general education.

Neo-humanist Uneasiness

But how about the great neo-humanist middle group? Here are to be found the large majority of colleges, those whose protestations and general-education programs both reveal an unreadiness to take a firm position at either end of the philosophical scale. These are the institutions that belong to the accrediting associations and are influenced

¹⁷ *Ibid.*, pp. 38-39.

by their standards. These are the colleges that have been taught to believe that the proportion of Ph.D.'s on a faculty is a good index of the quality of instruction to be expected. Here, the presidents, deans, and department heads are themselves usually Ph.D.'s, hence naturally inclined to respect a process of which they themselves are products.

Yet even these institutions have shown increasing signs of dissatisfaction with the teaching capacity of the output of the graduate schools. Thus from 1926 to 1931 a committee of the Association of American Colleges explored the problem of the preparation of college teachers, gaining toward the end of that period the co-operation of the Association of American Universities. In 1930 and again in 1931 the American Association of University Professors set committees to work on the same subject. These bodies uncovered widely varying opinions as to the adequacy of Ph.D. programs for the preparation of college teachers, but no consensus emerged and no influence was exerted. In a study made for the Commission on Teacher Education, American Council on Education, in the early forties, Hollis revealed the same confusion of voices.¹⁸

Following the war the Edward W. Hazen Foundation sponsored two conferences on the education of college teachers, attended chiefly by presidents and deans of colleges of liberal arts that would fit best in the neo-humanist category.¹⁹ At the first of these, William H. Kilpatrick proposed the creation of a new type of graduate school which, leaving the production of research scholars to the schools already so engaged, would devote its attention to the preparation of college teachers.²⁰ This seemed to his hearers — unhappy about the problem of finding good teachers as they appeared to be — far too radical a proposal.

WHAT COLLEGE PRESIDENTS WANT

In 1949-50 a committee of the American Association of Colleges for Teacher Education undertook to discover what traits college executives desire in college teachers for lower-division students. It is, of course, in this division of the colleges that programs of general education are concentrated. Through the co-operation of the Association of American Colleges and the American Association of Junior Colleges,

¹⁸ Hollis, *op. cit.*, chaps. v and vi.

¹⁹ Reports of both conferences were mimeographed by the Foundation for limited distribution.

²⁰ Kilpatrick's proposals, under the title, "Securing Better College Teaching," was later published in the *Educational Record*, XXXIX (January, 1948), 5-11.

the committee was able to obtain responses to a questionnaire from the executives of 419 colleges of liberal arts and 204 junior colleges as well as from the heads of 197 colleges for teacher education. These responses were in the form of ratings of the importance of a long list of traits that might be found in a college teacher.

The judgments of the liberal-arts leaders may be considered indicative of neo-humanist attitudes. The following table reports the traits rated "highly important" — the highest rating available — by at least 50 per cent of these 419 respondents.

Before comment is made on the particular items in the table, some comparisons between the responses of liberal-arts executives and of

TABLE 1
PERCENTAGE OF TRAITS IN COLLEGE TEACHERS OF LOWER-DIVISION
STUDENTS RATED "HIGHLY IMPORTANT" BY
EXECUTIVES OF COLLEGES OF LIBERAL ARTS *

	PER CENT
1. Inspires students to think for themselves and to express their own ideas sincerely	92
2. Is emotionally stable and mature	85
3. Organizes materials and prepares carefully for each meeting with class	81
4. Is friendly, democratic, tolerant, and helpful in his relations with students	78
5. Understands the problems most often met by college students in their work	77
6. His behavior reflects high ideals	77
7. Takes broad (rather than departmental) view of educational problems	69
8. Leads students to take responsibility for planning and checking own progress	68
9. Has infectious enthusiasm for teaching that inspires students to want to teach	65
10. Shows active interest in continued professional study	65
11. Regards himself primarily as a college teacher (rather than as a subject-matter specialist)	63
12. Has demonstrated skill in methods of instruction appropriate to his field	63
13. Has successfully taught his subject in college	63
14. Academic record in his special field is unusually high	55
15. Has genial personality and sense of humor	54

* For additional details see M. R. Trabue: "Characteristics of College Instructors Desired by Liberal-Arts College Presidents," *Association of American Colleges Bulletin*, XXXIV (October, 1950), 374-79; "Characteristics of Lower-Division College Teachers Preferred by Executives of Teacher-Education Institutions," *American Association of Colleges for Teacher Education Yearbook*, 1950, pp. 67-74; and "What Traits Should Junior-College Teachers Possess?" *Junior College Journal*, XXI (November, 1950), 140-42.

the heads of colleges for teacher education and junior colleges may be offered. Members of the last two groups are more apt to be imbued with instrumentalist ideas. Nevertheless, disagreements are fewer than might have been expected, the differences in ratings of the traits exceeding 10 percentage points in only a third of the cases. The greatest variation is in Item 9 where the teachers' college-school of education rating is naturally very high. The junior-college group is considerably lower than the others on Item 10, and the liberal-arts group in a class by itself in its relatively high rating of Item 13. The junior colleges are rather less concerned than the other two groups with Item 14, and the colleges of liberal arts somewhat less than the others with Item 15.

Several traits not listed in the table were rated "highly important" by 50 per cent or more of the executives of colleges for teacher education or junior colleges — either or both — with the result that from 14 to 24 percentage points of difference of opinion appeared among the three categories of respondent. The most extreme variation had to do with the item, "Has studied problems of college teaching and of its evaluation," which received a 52 per cent rating from the teacher-education representatives; yet even this item was thought "highly important" by nearly two-fifths of the junior colleges and almost one-third of the colleges of liberal arts. The teacher-education executives were also considerably more concerned than their confreres to find a teacher who "holds fair-minded attitudes on controversial issues." On the other hand, the junior-college group had an outstanding interest in getting a man whose "students voluntarily seek his advice on intimate personal problems" and who "assists students to collect, analyze, and evaluate data on their own personal problems." Just half of the heads of colleges for teacher education considered it "highly important" that a teacher's "graduate study [should have] included all divisions of his subject, plus extensive work in another broad field," but the junior-college group was not far behind and more than a third of the liberal-arts leaders agreed.

Implications for Teacher Preparation

Examination of these findings from the point of view of their implications for the preparation of college teachers leads to a number of interesting conclusions. Many of the highly esteemed traits are obviously expressions of personality and character. While graduate-school experience no doubt exercises some influence in these respects, it can scarcely be expected to achieve radical changes. The implications are chiefly for better selection of candidates who expect to teach

in general education. Several attitudes are emphasized — breadth of educational view, thought of self as primarily a teacher, fair-mindedness. The Ph.D. process is presumably designed to promote the last but probably has adverse effects, usually, so far as the first two are concerned.

It would naturally be supposed that a man trained in research would seek to inspire students to think of themselves, but, as Corey explains in an earlier chapter, the ability to do so skilfully cannot be assumed to be the automatic consequence of desire. Similarly, the fact that the young Ph.D. has himself been a college student cannot guarantee that he will have the kind of success in helping his own students with their study problems that the college executives presumably yearn for. This becomes all the more evident when it is considered how the young scholar is apt to differ, in interest and purpose, from a large proportion of the students in today's democratic colleges. Again, he will no doubt himself have learned to take responsibility for his own planning and to organize materials carefully for the purposes of research; but it does not necessarily follow that he will have learned much about how to help a wide range of undergraduates to plan or how best to organize his own procedures for the exercise of the teaching function.

Certainly doctoral training rarely includes elements specifically designed to assure attainment of knowledge about young people of college age. The learning process is not studied, much less the personal problems of youth or the techniques of counseling. If the graduate school is in a position to guarantee that one of its products has demonstrated skill in methods of instruction appropriate to his field, this will rarely be because it has deliberately seen to it that such skill was attained. This may account in part for the fact that more than half of the college executives think it highly important that a candidate for a job should already have successfully taught his subject in college; they would seem to prefer that some other institution experiment with the neophytes! They know, of course, that only rarely will the holder of a Ph.D. have specifically studied the problems of college teaching and the evaluation of such teaching.

When it comes to a question of the scope of graduate study, a further discrepancy between what college executives want in teachers of general education and what they are likely to get becomes evident. They strongly desire a broad, rather than a departmental, view of educational problems, and a large minority are looking for candidates whose graduate study included all divisions of their subject plus exten-

sive work in another broad field. Ph.D. programs, of course, have usually been calculated to narrow rather than to broaden the graduate student, to make of him a specialist in a corner of one department rather than a person capable of ranging over several.

One conclusion is now sufficiently clear. There are many qualities that college executives desire in college teachers at the general-education level that the usual Ph.D. process is not at all designed to produce. The same statement can be made, of course, regarding the M.A. and intermediate programs which constitute the preparatory experience of the majority of college teachers who have not completed doctoral work. The question next arises as to whether this situation calls for reform. Should Ph.D. requirements be modified for graduate students intending — or likely — to emphasize college teaching rather than research in their subsequent careers? Or, alternatively, should some new graduate-degree program be developed for the training of such persons?

Should Ph.D. Requirements Be Modified?

There are those who will be outraged by such suggestions, partly out of loyal belief in existing Ph.D. programs, partly out of disagreement with such judgments as were expressed by the college executives, and partly because of disbelief that teaching ability can be deliberately cultivated with success. Margaret B. Pickel, dean of women (chiefly graduate level) at Columbia University, has recently given illustration of this kind of reaction.²¹ Running afoul of a partial report of the study of the committee of the American Association of Colleges for Teacher Education, which was limited to the responses of presidents of teachers' colleges and deans of schools of education, she has voiced a violent criticism of the opinions expressed by those officers. Some of the traits esteemed by these executives she considers unimportant or even undesirable in a college teacher. These include emotional stability and maturity; friendliness; democratic interest in dull students; helpfulness, except by being brilliant and exacting; putting interest in teaching ahead of interest in his specialty. The rest, she appears to consider, will automatically occur in "any sensible person," with a "fine mind." Such can be counted on to inspire students to think for themselves, to have and arouse enthusiasm for teaching, to understand all the problems of students that are worth bothering about, to organize his materials and prepare carefully for each class meeting, to take a broad view of educational problems, to lead students to take responsi-

²¹ In her article, "The Acid Test of a Good Education," in *New York Times Magazine*, February 18, 1951.

bility (through "the old-fashioned method of setting stiff examinations and marking them hard"), and to manifest sufficient idealism in his behavior.

There are, Dean Pickel concludes, just "two essential requirements for a good professor: superior intelligence and the temperament of a scholar." "Teacher training," she adds, "cannot make this kind of man." Apparently, it is a belief that there is a plot on the part of "educators" to take over the preparation of college teachers that underlies some of Dean Pickel's most critical statements. Her handling of her theme would perhaps have been somewhat different had she known to how great a degree the executives of colleges of liberal arts agreed with their teacher-education colleagues. Be that as it may, her views and attitudes are certainly shared by many in the neo-humanist academic world. A good teacher, they hold, has to do exclusively with the intellectual realm; and he is born, not made.

However, the President's Commission on Higher Education, which reported in 1947, took quite a different view, being of the opinion that changes were necessary. "There is little to indicate," the Commission charged flatly, and in italics, "that the graduate schools are fully aware of their opportunities and obligations in the preparation of college faculty members." ²² "College teaching," the Commission went on to declare, "is the only major learned profession for which there does not exist a well-defined program of preparation directed toward developing the skills which it is essential for the practitioner to possess." ²³ The passage was concluded with the recommendation that: "Machinery should be set up immediately for exploring the feasibility of a national co-operative developmental study for the improvement of college-teacher preparation." ²⁴

²² *Higher Education for American Democracy*, Vol. IV, p. 14. Washington: Government Printing Office, 1947.

²³ *Ibid.*, p. 16. Dean Pickel is very scornful of this statement which she ascribes to "another so-called educator." In view of this fact it may be desirable to note that the President's Commission of twenty-eight persons included the presidents and deans of nine universities, four colleges of liberal arts, one teachers' college, and one junior college; three churchmen; two college and university board chairmen; and single representatives of agriculture, college faculties, educational foundations, journalism, labor, the United States Office of Education, and women's affairs. The chairman, president of the American Council on Education, had been trained as an historian and later served both as a university president and as United States Commissioner of Education. Less than a third of the members of the commission could have qualified as "educators" according to Dean Pickel's use of that term.

²⁴ *Ibid.*, p. 24.

FINDINGS OF A RECENT CONFERENCE

Partly in response to the Commission's challenge and partly at the urging of the Council on Co-operation in Teacher Education, the American Council on Education and the United States Office of Education called a national conference on the preparation of college teachers in December, 1949. This was attended by some 160 persons, including thirty-one deans of graduate schools of arts and science and sixteen representatives of the faculties of such divisions. Also present were thirty-one presidents, deans, and other administrative officers of colleges of liberal arts, seventeen similar officers of complex universities, thirteen of teachers' colleges and colleges of education, four of other types of four-year specialized college, and two of junior colleges. Thirteen professors of education were in attendance. The remaining participants were chiefly federal and state education officials and representatives of national educational organizations and of foundations. It was evident that the conference members were particularly concerned with teaching in the area of general education.

The report of the conference reveals a considerable readiness to look with favor on experimental reforms in the process of preparing college teachers.²⁵ The central focus of attention was the Ph.D. program. While one discussion group thought that, "for teaching assignments in junior colleges and in many smaller [four-year?] colleges, a broad program of study leading to a two-year Master's degree is entirely adequate as subject-matter preparation for teaching," it did not expand this proposal and indicated some doubt that it was likely to prove acceptable.²⁶ In an address at a general conference session United States Commissioner of Education Earl J. McGrath offered a proposal similar to that of Kilpatrick (p. 312), namely, that training for research and preparation for college teaching should be separated and made the responsibility of distinct institutions or university administrative units. The work of the unit preparing teachers, he recommended, should be recognized as professional, in the sense that the work of a medical school, law school, or school of social work is professional.²⁷ This idea evoked no recorded favorable responses, but a number of unfavorable ones were recorded.

²⁵ Theodore C. Blegen and Russell M. Cooper (editors), *The Preparation of College Teachers*. Washington: American Council on Education, 1950.

²⁶ *Ibid.*, p. 61.

²⁷ *Ibid.*, pp. 33-35. A similar suggestion has also been made by Howard Mumford Jones, former dean of the Harvard Graduate School, in his *Education and World Tragedy*, p. 154 (Cambridge, Massachusetts: Harvard University Press, 1936).

periences, if properly supervised, were generally recognized.³⁵ Yet the group specifically charged with considering this topic was not prepared to suggest that apprenticeship be made an institutional requirement.³⁶ Significant in connection with the whole consideration of professional training were the differences of opinion expressed or implied regarding the desirability of permitting professors of education to have a share in the preparation of college teachers.³⁷

It can be seen that the conference as a whole was far from going overboard for reform of Ph.D. programs. It would, of course, be naïve to suppose that any such outcome was likely. Probably, then, what was most significant about the occasion — apart from the opportunity that it provided for stimulating give and take — was (a) the evidence presented of experimental modifications of Ph.D. requirements at a considerable number of graduate schools, (b) the permissive attitude exhibited toward such experimentation, and (c) the unanimous approval of a proposal to establish a basis for continued study and action relating to the preparation of college teachers.

Experimental Programs Reported

Special efforts to improve the preparation of college teachers were reported at the conference as existing at twenty-seven different institutions.³⁸ These varied widely. Some involved single elements, such as apprenticeship; others went considerably further. Some related to single departments; others to divisions only; still others to the entire graduate school. Some were highly informal, often representing opportunities available but not required; a few deserved to be considered systematic new plans formally adopted for the training of a specially recognized class of prospective college teachers. Some of the last type lead to the award of a special Doctor's degree. Most of these new programs were evidently designed with particular reference to the need for teachers competent to serve in the area of general education.

A few of the more thoroughgoing programs may be briefly described. Syracuse has established three doctoral programs especially designed for prospective college teachers — programs leading to the degrees of Doctor of Social Science, Doctor of Philosophy in Humanities, and Doctor of Philosophy in Science. The programs, super-

³⁵ *Op. cit.*, pp. 63-65, 112, 123-44, 160.

³⁶ *Ibid.*, p. 143.

³⁷ *Ibid.*, pp. 107-12, 120-21, 131, 150-52, 154-58, 163-64.

³⁸ *Ibid.*, pp. 63, 67, 75-76, 94-95, 99, 129, 134, 138, 140, and 147-64. Other institutions are known to be making comparable efforts.

vised by interdepartmental committees, are characterized by graduate study in two or more departments. All require specific training for teaching, this being provided co-operatively by the academic departments and the all-university Graduate School of Education. Supervised apprenticeship teaching experience is included. Dissertation requirements vary from division to division but all provide for breadth and relevance to teaching problems. In the humanities two foreign languages are still required; in the sciences one; in the social sciences none.³⁹

Michigan State College takes special advantage of its Basic College, the institution's unit for general education. This college serves as a laboratory for candidates for the Ph.D. who are specially concerned with college teaching, and its faculty members share with their colleagues in the School of Graduate Studies responsibility for guiding the experiences of such persons. Divisional as well as departmental majors are available, and breadth of preparation is required. The dissertation, whenever possible, must deal with a problem that cuts across departmental lines. Participation in a seminar in higher education and supervised apprentice teaching are required. The Division of Education in the College of Science and Arts shares responsibility in the program.⁴⁰

Harvard University has taken a first step along lines similar to those pioneered at Syracuse by the introduction of a new degree in one division, Doctor of Philosophy in Social Science. This is especially designed to meet the needs of candidates for teaching positions. Interdepartmental study is emphasized: "The thesis, dealing with a topic or problem which does not lie exclusively within any one social science discipline, may be submitted in two related parts, one part consisting of an original contribution to knowledge in which mastery of research techniques is evident, the other part being an interpretative essay demonstrating the candidate's ability to synthesize and criticize a body of material drawn from various segments of the Social Science area." While a reading language requirement seems appropriately demanded, "whatever language requirement seems appropriate to a particular program" may be fixed. Observation of undergraduate courses in general education and the acquisition of teaching experience, either at Harvard or elsewhere, are expected. Participation in an extracurriculum course in college teaching sponsored by the Radcliffe Graduate School is encouraged. This course offers no academic credit,

³⁹ *Ibid.*, pp. 161-63.

⁴⁰ *Ibid.*, pp. 153-54.

but students receive certificates of attendance upon its completion.⁴¹

The University of Chicago, after extended study, has adopted a statement of principles regarding preparation for college teaching and has taken a number of steps toward implementation. The statement emphasizes the importance of a college teacher's having a well-balanced general education, research training "in connection with a problem of such scope and significance as will lead him to employ a considerable variety of the principles, materials, and techniques of his eventual teaching fields," "command of the broader division of knowledge within which his field of concentration lies," "some knowledge of the interrelationships of the various fields of knowledge and their implications of these interrelationships for educational theory and practice," acquaintance with "the variety of relations which have obtained or which may obtain among (a) the college, (b) the college teacher, and (c) the society within which higher education is carried out," and apprenticeship experience. Divisional Master's degree programs in the social sciences and the biological sciences have been developed, and there are interdepartmental and interdivisional programs leading to the Ph.D. degree in human development, social thought, international relations, planning, history of culture, analysis of ideas and the study of methods, and studies in language and communication. A non-credit-bearing seminar on higher education and teaching is provided for graduate students who have been admitted to candidacy for the Doctor's degree. In addition, a number of fellowships in college teaching are available to degree candidates, providing for supervised apprenticeship and other special experiences. Finally, Chicago has produced several motion-picture films on college teaching.⁴²

At the University of Missouri a full-time director for a new program for the improvement of teaching in colleges and universities has been appointed. This program is designed to be helpful to other institutions in the state as well as to influence practice within the University itself. Required courses in college teaching have been introduced by several departments in the College of Arts and Sciences. Many noncredit seminars on teaching problems are held by various departmental staffs of several colleges in the University. Since a considerable

⁴¹ *Ibid.*, pp. 75-76, 95, 160. The quotations are from the 1950 *Harvard University Announcement* concerning the degree of Ph.D. in Social Science. The nature of the Radcliffe course may be ascertained through reference to *A Handbook for College Teachers*, edited by Bernice B. Cronkhite (Cambridge: Harvard University Press, 1950), which includes the lectures offered.

⁴² *Ibid.*, pp. 67, 94, 134, 147-49.

proportion of graduate students at Missouri are also serving as instructors, elements of in-service training are also present.⁴³

Conference participants seemed to be quite willing to approve experimentation along such lines as have been cited. The group specifically concerned with institutional programs declared those studied to "have in them a number of commendable features which deserve . . . [vigorous] encouragement and which other institutions might well emulate."⁴⁴ It concluded its report by recommending "the promotion and facilitation of progress in the development of programs for the preparation of college teachers . . . through (a) continuous examination of educational philosophies, (b) constant clarification and definition of the purposes of college education, (c) bold experimentation with new curriculums and instructional procedures, and (d) periodic evaluation of the effectiveness of programs."⁴⁵

SUMMARY AND RECOMMENDATIONS

Certain conclusions can now be offered as this chapter is drawn to a close:

1. Philosophical differences lead to different opinions regarding not only the nature of general-education programs but also the purposes it is hoped teachers in those programs may achieve. This leads to different judgments as to how such teachers should be prepared.

2. Rationalists and instrumentalists alike are dissatisfied with the nature and effects of conventional Ph.D. programs. Neither desire in teachers the highly specialized research interests and skills that those programs are designed to develop. Both esteem intellectual breadth and a primary concern with the teaching task. The rationalists, however, want teachers steeped in the tradition of the Great Books and dedicated exclusively to cultivation of the intellect. The instrumentalists want teachers vitally concerned with the whole student and the whole contemporary society, capable of mediating all useful knowledge to the one in the interest of improvement of the other.

The neo-humanists, with their tendency to rely on some pattern of highly organized and separated subject matters to provide a general education, are more likely to be satisfied with the Ph.D. process of which they themselves are normally a product. They often incline to the view that, if anyone who "knows his stuff" is not a good teacher,

⁴³ *Ibid.*, pp. 67, 156-57.

⁴⁴ *Ibid.*, p. 165.

⁴⁵ *Ibid.*, p. 168.

it must be due to native disabilities that no special preparatory efforts could have reduced.

4. There is, however, even in the neo-humanist camp a growing feeling that more in the way of deliberate thought and effort should be devoted to preparing graduate students specifically for the exercise of their prospective functions as teachers and faculty members. It is known that a majority of those who receive the Ph.D. degree engage in such functions to the exclusion of very much in the way of the kind of research for which they were trained. Moreover, college presidents and others concerned with general education are increasingly critical of the beginning teaching ability of the average young Ph.D.

5. For some of the suggestions for improvement in the preparation of college teachers support can be found in all three philosophical camps. All would agree that a well-rounded general education should be a requirement, though they would of course, differ as to what the type of that general education should be. Support in all quarters — though least in the neo-humanist — can be found for the broadening of the content of graduate study and the emphasizing of the inter-relationships of the several departmental and divisional subjects. The idea of a supervised-teaching apprenticeship is not likely to excite opposition anywhere, provided it is in a program of general education of the sort approved by the individual being consulted and the supervision is provided by an approved person — though views will vary as to the values that can be expected from such an experience, and the instrumentalists will be most likely to want to make it a requirement.

6. When it comes to the dissertation, the rationalists, if they thought it important at all, would wish it to take the form of analysis and interpretation of the Great Books. The instrumentalists would prefer attention to be focussed on living issues with special reference to the instructional problems involved. Some neo-humanists seem willing to move a certain distance in the latter direction, although most are probably pretty well satisfied with existing dissertation requirements.

7. The idea that prospective college teachers should study the growth and development of young people seems obviously intelligent to the instrumentalists. In this way, sensitivity to student needs, emotional as well as intellectual, can be developed; insights regarding the learning process can be gained; and the groundwork of a competence in counseling, considered to be an essential part of the teacher's

role, can be laid. Rationalists and a considerable proportion of neo-humanists reject this idea, which to them smacks of anti-intellectualism and coddling. But some neo-humanists seem somewhat tempted by it.

8. Instrumentalists are also most likely to favor, in preparatory programs for college teachers, the inclusion of study of the college and its educational functions in relation to students and society, of curriculum and course construction, of instructional methods and materials. The rationalists will want their teachers to gain, somehow, agreement with their basic ideas about general education; but, this accomplished, issues of curriculum, courses, and materials are, in their opinion, automatically solved; they would probably be satisfied to leave teaching methods to be learned by example and apprenticeship. Most neo-humanists, especially those with a phobia against "educators," are unfavorable to explicitly professional education, although here again there are some significant exceptions.

9. The suggestion that, in recognition of the differences in need of prospective research specialists and college teachers, the present graduate school be divided into two distinct parts has met with little favorable response. Some graduate schools of education are producing teachers, not only of education, for junior colleges, teachers' colleges, and even colleges of liberal arts. It is conceivable that this practice may increase, but the graduate schools of arts and sciences show no desire to divest themselves of either of their present functions.

10. However, an increasing number of graduate schools are now exhibiting interest in re-examining their work as preparers of college teachers and some have modified established patterns. A few have developed programs specifically designed for prospective college teachers. Some have done this within the regular Ph.D. framework; others have originated new degrees for the purpose. None, as yet, have gone nearly as far as many instrumentalists would be delighted to see them do. However, the amount of stir of this character and the strength of favorable response from consuming interests are sufficient to justify the expectation of further developments.

11. What is to be hoped for is that some university will have the courage to develop two-year and three-year programs functionally designed to prepare teachers for general education. The details of such programs should be planned with the advice of professors and administrators in colleges where outstanding efforts to develop a superior general education have been carried on; the approach should not be in the spirit of "How much do we dare to tinker with the

Ph.D. pattern?" Both books and what books are about will be studied in such a program. Broad scholarship will be promoted, but so will skill in the use of such scholarship for teaching in general education. It will be made certain that prospective teachers understand the purposes of general education, its relation to the contemporary social situation, the nature and needs of young people—a broad range of young people—of college age, how learning takes place, and what methods and materials to use so that their teaching may become most effective. While the program will develop specialists in various aspects of general education, it will develop them together so that they will be prepared to work as collaborators, not competitors, once they are on the job. It will provide the prospective teachers with early and frequently repeated opportunities to observe general education in practice and to discuss its problems with the practitioners; it will culminate in a responsible apprenticeship or internship under skilful supervision. Any special writing required will be of such a nature as is clearly calculated to promote development of skills contributory to good teaching—in general education. Successful completion of a three-year program of this character will be recognized by a Doctor's degree; if a new kind has to be invented for the purpose, this will worry some people for a while, but in a little time those who have it will be in heavy demand.

12. Such bold experimentation must be encouraged and facilitated. The improvement of general education at the college level in the United States is profoundly necessary. Such improvement will come only as more first-rate college teachers of general education become available. Programs for the in-service growth of teachers already at work are essential. But the provision of a flow of new teachers, superior because of superior preparation, is, for the long run, most important of all.

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CHAPTER XV

FACULTY PARTICIPATION IN THE DEVELOPMENT AND IMPROVEMENT OF GENERAL EDUCATION

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REORIENTATION OF FACULTY INTERESTS

Although the purpose of a general-education program is to provide an improved type of education for students, faculty participation in the development and improvement of such a program is inevitably a venture in the education of the faculty that undertakes it. Unfortunately, the undertaking of the project has resulted in serious rifts in some faculties. In a few instances, as a result of the differences of opinion which have emerged in the process of the development of a program of general education, some faculty members have felt it necessary to resign from the college or university of which they were members. For the most part, however, the collective activity of the faculty in the development and improvement of a general-education program has been a force for binding the faculty more closely together through their working at a common task. In such situations, their co-operative endeavor has been a stimulating experience to individual members of the faculty and has resulted in a clarification of the goals of the college.

For many faculty members, participation in such a program has opened new vistas, not only of the general function of education but also of the contribution which his own special subject can make to it. It may seem anomalous that college or university faculty members are not continuously aware of the need for a general-education program and the methods by which such a program can be carried out. The prevailing situation is, however, a logical result of the nature of the average faculty member's own background.

The education, and more especially the training, of most college or university faculty members has not been in general education, and many of them are not normally aware of the ends it seeks to attain. The emphasis both in undergraduate and in graduate study has been upon the attainment of knowledge and skills and of competence in a single subject-matter field. Certainly, college graduates, including faculty members, in their undergraduate work have usually been expected to study or, more appropriately, to earn a certain number of credits in various subjects outside of their "majors." The subjects represented by these credits were supposed to constitute their general education. Sometimes these subjects did actually contribute to general education; but very seldom was an attempt made to relate the teaching of them to that acclaimed purpose.

Not only has the formal training of most faculty members been neglectful of general education but the very basis upon which they were selected for appointment to their positions on the faculty was their promise of competence in their special fields of study. Most department heads do not ask for, and seldom receive, a statement of the work done by a prospective faculty member outside of the field in which he is expected to teach. It is a discouraging experience, indeed, for a college dean to ask about the general education of a candidate for a teaching position. Moreover, the recognition which a faculty member receives as teacher and the possibility of his promotion usually depend upon the contribution he makes in his own field. He is a member of a department which, in some respects, is in competition with other departments in an attempt to attract students and to place them in lucrative positions after graduation. He, therefore, tends to think in terms of reserving for the major subjects a larger and larger share of the credits which a student must earn for his degree.

In most colleges and universities the development or improvement of a program of general education is a long-term and gradual process. One reason for this situation is, as has been pointed out, that it must be done by a faculty who for the most part are trained as specialists, who receive their recognition on the basis of work done as specialists, and who are teaching a curriculum that emphasizes specialization.

In view of the type of formal education possessed by most faculty members and the situation in which they carry on their work, it could hardly be expected that they would naturally be aware of the meaning and implications of a general-education program. On the contrary, such a development of modern education must be called to their attention. Yet it is a tribute to the open-mindedness of college teachers, as

well as to their mental flexibility and their industry, that so many of them are currently engaged in the construction or improvement of general-education programs. This task requires serious study as well as the expenditure of time and energy. It should be remembered that most faculty members who are working at this task do so in addition to carrying on their usual duties. Cooper senses the significance for general education of such reorientation of the professional interests of college teachers, as may be noted in the following observation:

The really amazing fact is that on hundreds of campuses throughout the nation individual teachers and entire faculties are becoming aroused concerning the general-educational needs of students and are busy revising their programs to meet those needs. The vocational interests remain and the satisfactions from the advanced work of major students continue, but a new note is added. Professors are rallying to the demands of the time and becoming vitally interested in helping to make competent persons out of students whose major interests may lie far afield. The very difficulties involved in organizing material and presenting it in a manner which will challenge the imagination and motivate the student is in itself an exciting experience. For many instructors the development of general-education courses has opened a new frontier of educational discovery and fulfillment.¹

ORGANIZATION OF THE GENERAL-EDUCATION PROGRAM

A very small number of institutions, for example, Sarah Lawrence College, have been able to institute a program of general education when their colleges were first established. Such a college can formulate its philosophy of education, select its teachers with that philosophy in mind, work out a curriculum and methods of instruction based upon that philosophy and then, after having chosen the students who give promise of being able to profit by the type of program agreed upon, proceed to the work of developing a program of general education.²

In a few institutions, too, a special college has been created to provide a program of general education. The Experimental College at the University of Wisconsin and the General College at the University of Minnesota are notable examples of this method of establishing a general-education program even though the method by which each seeks to attain the objectives of such a program is unique.

¹ Russell M. Cooper, "Faculty Adventures in Educational Planning," *Journal of General Education*, II (October, 1947), 35-40.

² "Report of the President (Sarah Lawrence College), 1926-1936." Presented by President Constance Warren at the celebration of the tenth anniversary of the founding of Sarah Lawrence College. Brooklyn, New York: Sarah Lawrence College, 1936.

In some colleges and universities, through the dynamic leadership of a president or of a well-organized faculty group, general-education programs involving changes in basic curriculum concepts and procedures have been instituted after substantial investigation of the problems anticipated. For example, it is said that President Wood, "in 1921, and after nine years of exploratory study, committed Stephens College to the development of a program of general education for women as women."³ In another connection, the report of the results of this experiment carries the following interpretive comment on the nature of the process and the influence of the original motivation:

The history of Stephens College since 1921 is the record of an adventure in general education designed to meet the needs of women in modern society. Those who launched the adventure had at the beginning certain convictions about the proper nature of general education — particularly of general education for women. They had also a determination to construct a curriculum and a body of philosophy and practice which would insure the attainment of what seemed to them the essential ends of such education. In the twenty-five years since the adventure began there have been no important subtractions from the original convictions. They have been constantly amplified and clarified; but out of those root beliefs the present program of the College has grown.⁴

ORGANIZING FACULTY COMMITTEES

Many suggestive procedures are noted in the various reports of the experiences of college faculties that have undertaken to adapt their programs of instruction to the needs and interests of new classes of college students. The following sections of this chapter are based in part on such reports and in part on recent correspondence with the deans of a number of colleges where well-designed experiments are being carried on.

The formal process of developing a program of general education usually begins when the faculty votes to have a committee appointed to study the need for revision of the college curriculum. The selection of the members of such a committee is exceedingly important. The responsibility for the selection usually devolves upon the dean of the college. The tendency is to appoint one member from each of the departments. A committee organized on such a basis is not likely to be successful in developing a program of general education because each member, whatever his own ideas may be, will almost certainly be

³ *Explorations in General Education*, p. 6. Edited by Roy Ivan Johnson. New York: Harper & Bros., 1947.

⁴ *Ibid.*, p. 3.

expected by his colleagues to act as the representative of his department and to look after its "interests"—its "interests" being the maintenance of the department's enrolments in the "required courses" of the curriculum.

In many cases the curriculum revision recommended by such a committee has consisted primarily of reshuffling the "cards" held by the various departments in the game of maintaining student enrolments. The "cards," of course, are the courses offered by each department for which students can register in order to receive the credits needed to satisfy requirements outside of their major fields of study. Obviously, such curriculum revision cannot produce a program of general education. The process of the adoption of a program of general education will be facilitated and the measure of success in carrying forward such a program at any institution will be greatly enhanced if the leaders in the program will take advantage of recent developments in the theory and practice of group dynamics. The nature of these theories and practices are indicated by Brumbaugh and Pace in chapter xiii.

The committee should be composed primarily of those staff members who have shown their interest in problems of education generally, regardless of the departments to which they belong. It is sometimes expedient to have on the committee some individuals who are known to be in opposition to curriculum change and to be lacking in an awareness of the need of a program of general education. The inclusion of such individuals in the committee membership will give the committee advance notice of the type of opposition that may have to be overcome in the faculty generally and of the background of ideas and information with which the faculty needs to be supplied before any specific proposals are made for curriculum revision.

EXPLORATORY STUDIES AND REPORTS

The committee on curriculum revision usually looks upon its task as a long-range one. One of its first objectives usually is to acquaint the faculty with the basic issues and problems in education. Its first or preliminary reports will call attention to the programs of general education adopted at other institutions and the philosophy or principles upon which they are based. It will encourage discussion of its preliminary reports in faculty meetings.

The committee-inspired discussions will naturally lead to consideration of the literature on educational problems in general and then to a consideration of the particular problems of their own college.

Finally then, as a result of the committee's preliminary activity, the faculty will be made aware of what is going on in the field of education through an acquaintance with what other colleges are doing, the studies of learned societies, popular discussions of education problems, and reports of inquiries about the attitude of society at large toward the work of colleges and universities. It will have considered the relation between college and secondary schools on the one hand and the relation between college and professional schools on the other. It will also have considered the character of its own student body and the educational agencies and activities outside of the classroom and course of study which contribute to students' education.

No faculty should expect to institute a successful general-education program unless it has acquainted itself most thoroughly with the purposes and resources of the institution which it serves. The Syracuse University Self-Survey of 1949 is an illustration of a desirable preparatory experience for the faculty concerned with the problems of curriculum reorganization. The report deals with the following features of the institution: the educational program and its resources, the library, the bookstore and press, student personnel services, faculty and instruction, plant and facilities, administrative organization, and financial operations.⁵

The need for a consideration of the nature of the students who are currently in the college or who in the future may seek to continue their education in college has been dealt with in the chapter by MacLean and Raushenbush (chap. viii). Williams has provided an example of a systematic study and discussion of the nature of present-day college students and their backgrounds. This study included 1,300 students in the General College of the University of Minnesota. The motive of the investigation is indicated by the following statement:

In recent years we have come closer to seeing the realization of an early American ideal of universal public education through the secondary school than anyone really ever dreamed possible. Although there are still thousands of young people who fail to complete high school, there are fewer and fewer who do not enter and increasingly larger numbers who are actually graduated. Until 1940, and before the enrolment in colleges and universities began to be affected by the national emergency, there was an enormous increase in the numbers who enrolled in institutions of higher learning. The kinds of students who seek higher education and their backgrounds and educational needs have inevitably been affected. It has long been obvious that programs of purely

⁵ *University Self-Survey: Report to the Faculty*. Edited by C. Robert Pace. Syracuse, New York: Syracuse University, 1949.

classical, professional, or preprofessional training could not meet the widely varying needs of the multitude of young people now entering college.

It is also obvious that any college that tries to make its students rather than its curriculum the center of its being must take some pains to find out what those students are like. There will always be some colleges that can or must begin with a specified curriculum and admit only students who fit the curriculum. But most state universities and junior colleges and many liberal-arts colleges are not in this class. Students enrol in these institutions for many reasons but almost never because of predetermined fitness for a particular curriculum. Even if they could do so, it is doubtful whether the majority of these institutions should exclude all save the selected few who are best fitted for the traditionally academic or preprofessional curriculums they now offer. An American tradition of tax-supported education that embraces the state university, a widespread though partly fallacious American veneration for the intrinsic value of higher education, and periods of economic depression when youth find it difficult to secure employment are factors contributing to the increase in college enrolments. These conditions make it seem more desirable for many of our institutions of higher learning to accept the students as they are and build new curriculums to fit them. This obligation would seem to fall heaviest upon the tax-supported state universities and junior colleges, but hundreds of small liberal-arts colleges must soon follow this lead if they are to maintain enrolments at self-sustaining levels and at the same time offer an education appropriate for the students they admit.⁶

Only after a rather lengthy period, often two or three years, of faculty discussion and study of such problems as those indicated above, can there be any expectation that a sound program of general education will be adopted. Fortunately, this process has been shortened at a number of colleges because the faculty had adopted the practice of devoting a portion of its meetings to the discussion of educational policies and principles. In some institutions, too, the administrative officers had followed the practice of sending a mimeographed copy of significant articles on educational problems to faculty members or of calling their attention to significant publications in the field of general education.

DEFINING THE OBJECTIVES OF A SUITABLE PROGRAM

When the background has thus been built up, the committee's next task is the formulation of a statement of the objectives of the general-education program upon which the faculty can agree. In most instances the procedure which has been followed for the accomplishment of this

⁶ Cornelia T. Williams, *These We Teach*, pp. 173-74. Minneapolis: University of Minnesota Press, 1943.

task is the preparation of a statement by the committee. This statement is then submitted to the faculty for its consideration. Another method that has been followed is to ask all members of the faculty to submit statements of their ideas as to what the aims of the program of general education should be. The committee's recommendation is then based upon these statements.

Most faculties do not encounter too great difficulty in coming to an agreement on the statement of the objectives of a general-education program. They are usually stated in general terms. Nevertheless the formulation of such statements does cause a faculty to face squarely such questions as the following:

Shall our general-education program be built upon traditional subject-matter foundations or upon student needs?

Shall we provide general education for only the select few or for a very large group?

What is to be the relation between the general-education program and preparation for specialization and for professional-school studies?

To what extent are the educational aspects of extracurricular activities and special services, such as student counseling and health services, to be recognized as part of the general-education program?

Are we going to be concerned with the type of persons our graduates are going to become as well as with how much they will know?

EVALUATION OF COMMITTEE PROPOSALS

The critical point of faculty participation in the formulation of a general-education program is reached when the committee reports its recommendations for the contents of the curriculum. Realizing this fact, it is common practice for curriculum committees to have special preliminary meetings with individual departments or groups of related departments to explain how the proposed curriculum will affect them and to receive their suggestions for modification of original proposals. It should be remembered that any^a real general-education program will discard the rather common practice of accepting any one of a number of separate introductory courses in a number of departments for the satisfaction of the general-education requirement in a given field. For example, in most colleges before curriculum revision to institute a general-education program is accomplished it is quite usual to allow the beginning course in chemistry, physics, geology, or physical geography to satisfy the physical-science requirement, or any one of a number of beginning courses in economics, history, political science, or sociology to satisfy the social-science requirement.

As a very minimum, the proposals for a general-education pro-

gram will provide that there be substituted for such requirements an integrated unit of study, which will not only embrace facts and ideas from all fields in each of the broad areas usually designated as physical sciences, social sciences, humanities, and biological sciences but the purpose for which the integrated unit will be intended will be broader than the preparation for advanced study in any one of the subjects in which a student will be expected to "major" or specialize. Individual faculty members and department staffs are interested in knowing how their own work will be affected by such a change. Obviously, too, the changes proposed will cause reduction in the class enrolments in most elementary subjects; and some faculty members will be wondering whether there will still be work for them to do. The departments will also be wondering how the proposals will provide for the basic work for the students who later will "major" or specialize in the subjects taught in the departments.

If additions to traditional subjects are suggested as part of the general-education program, further complications arise. For example, if it is suggested that training in family life or health be added, the question of cost will arise. Most colleges and universities operate on limited finances. The faculty realizes that if new functions are undertaken the result will be less funds for traditional departments.

The purpose of the preliminary meetings which the committee holds with groups or departments, then, is to overcome as many objections as possible. This process causes adjustments and compromises to be made before the proposals are submitted to the faculty for formal approval.

When the proposals are finally submitted to the faculty, it is almost certain that some of the objections raised in the preliminary meetings will not have been met. Consequently, there will be serious arguments, and further adjustments will have to be made if any program is to be approved.

Many faculties operate under rules which require a two-thirds vote or some other extraordinary majority for the approval of curriculum changes. Consequently, when a program is finally adopted, it often does not appear to make very many changes in the existing curriculum or to deviate seriously from the objectives of the general-education program as originally proposed. Most programs of general education, therefore, represent the greatest step toward the attainment of a goal which can be taken at a given time. Consequently, it is important for a faculty to regard its general-education program as a tentative one and one which must be developed further by appropriate revisions.

Inasmuch as most general-education programs are the result of

compromise and adjustment to dominant opinions of a given college or university faculty, very few if any of these programs will conform to any one of the three philosophies of general education discussed by Taylor in chapter ii of this yearbook. Moreover, after the program has been put into operation we find, as Taylor has indicated, that, "any idea for education, except that of a military academy, becomes so modified in practice by the character of the individuals who make up the institution, that it would be fairer to say that what we have is a set of ideas which are then recreated in various forms (in this case recreated as programs of general education) by those who teach and those who learn."

FACULTY ADJUSTMENT TO NEW AIMS AND PROCEDURES

Faculty participation in the development and improvement of a general-education program should not be limited, and usually it is not limited, to the proposal and agreement upon a curriculum. The creation of the units of study and the determination of methods for carrying out the program also call for continuous study and discussion by the faculty.

The creation of the units of study which are to form the curriculum is usually undertaken by a committee for each unit. Most colleges have not found it feasible to use the units as they have been worked out in other colleges. A few have tried to use the units developed at Chicago, for example. For the most part such transplantation has not proved satisfactory, and it is found necessary to prepare units of study designed for local use. Because the teaching of the general-education units involves the use of facts, principles, and ideas from various fields of knowledge and because most faculty members have been trained in only one field, colleges have relieved those who are interested in teaching the broader units from all or part of their regular teaching duties in order to give them an opportunity to develop the new units of study. Very few universities provide any training for prospective teachers in the general-education program. A notable exception is the Graduate School at Syracuse University, where its Maxwell School has instituted an elaborate training program for teachers of general-education social sciences on the college level. Notable progress in this direction is also being made at Harvard; and Chicago's Committee on the Preparation of Teachers has a subcommittee on the preparation of college teachers in this field.

Even if there were teacher-training programs in all the phases of general education, it would still be necessary for a faculty to give an opportunity for some of its staff to secure additional professional

training. No institution could, even if it wanted to, discharge staff members who were no longer needed to teach students in traditionally organized classes because of the adoption of a program of general education. Some faculties, in adopting a general-education program, literally make it necessary to lift themselves into the new program by their boot-straps. Or, as President Wriston described it, the process of instituting curriculum revision is akin to the thorough remodeling of a home while the family continues to live in it. Such a process obviously calls for a high degree of faculty participation and co-operation.

In addition to the committees which are used to develop units of study in the general-education program, some institutions have created workshops or faculty seminars where teaching materials and syllabi are developed, evaluation methods devised, and other work incident to preparation of teachers and units of study is undertaken.

In order to give continuity and emphasis to faculty participation in the development and improvement of general-education programs, councils on general education composed of rather large numbers of faculty members have been created. The functions of such councils include the determination of general policies to be followed in the carrying out of the program and the co-ordination of the various general-education activities. The work of the council is often assisted by the appointment of an administrative officer, an associate dean in charge of general education or a director of general education, one of whose functions is to keep before the faculty the needs and the importance of the general-education functions of the college just as heads of departments do for their subject-matter fields. In chapter xiii Brumbaugh and Pace have analyzed the various ways in which the organization of general-education programs can be made an integral part of the college or university administration.

As a result of the fact that college and university faculties have participated seriously and effectively in the development and improvement of general-education programs, there is great variation in the types of programs which are in operation today. Though this great variety may be somewhat confusing to the student of education, it does have the advantage that experimentation is being carried on for the mutual benefit of all colleges and universities engaged in a common task. Each can learn from the types of activity undertaken in other institutions. Moreover, each college or university faculty is engaged in administering its own program — a program which it presumably understands and which is suited to local needs as currently conceived.

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CHAPTER XVI

THE DESIGN AND OPERATION OF PROGRAMS OF GENERAL EDUCATION

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Any discussion of "total programs of general education" — if there were such an entity — must perforce stake out some limits. Otherwise, the "seamless web of educational relationships" (to paraphrase Maitland) would lead to a discussion of practically the whole universe of human experience. In the first chapter of this volume, McConnell raises some of the major issues and problems in general education and sets the stage for their discussion. The final chapter is concerned with exploring some of these issues more fully in the light of the discussions of the other contributors. Particularly, an attempt is made to identify and comment on aspects or problems shared in common by divergent approaches to general education, regardless of their specific design or philosophical orientation.¹

Some of these questions which one might seek to explore would be: Are attempts to provide unified educational programs unique to the college level and to our times? To what extent have the varied and contrasting philosophical concepts of general education found in the literature been translated into operating programs? To what extent is general education in its various forms related to the dynamics of a democratic society? What are the trends with regard to prescribing general-education courses? By what means is integration achieved in general-education courses and programs? What is the relationship between general and vocational education? And finally, how does the

¹ A resume of the various features of general education may be found under that heading in *Encyclopedia of Educational Research*, pp. 489-500. Edited by Walter S. Monroe. New York: Macmillan Co., 1950 (revised).

balance sheet add up with regard to the strong points and the limitations of the general-education movement?

THE BACKGROUND OF GENERAL EDUCATION

It is interesting, and somewhat curious, to note that the general-education movement, by name, at least, has been identified with college rather than with high-school programs. For many years the *Education Index* carried the entry: "General education. See Curriculum — Colleges and Universities." As Brumbaugh and Pace also observe, this did not mean that the secondary schools were unconcerned about the question; it meant rather that experimentation in general education had been so extensive at the college level that this identification had resulted.²

The major portion of the high-school program, junior as well as senior, is devoted to what has been called "preparation for the various aspects of living in a democratic society." In spite of much justifiable criticism of the high-school curriculum because it has been too academic and, hence, unsuited to the great majority of its students who would not go to college, the spirit of what is now called general education has animated many proposals and programs at the secondary level. The well-known "seven cardinal principles of secondary education," formulated as early as 1916, illustrate this concern. The Educational Policies Commission's more recent proposal, classifying the purposes of the secondary-school program into four major aims of (a) self-realization, (b) human relationship, (c) economic efficiency, and (d) civic responsibility, has a most familiar ring to persons conversant with college-level statements of general-education objectives.³ Likewise, many high-school experiments with curriculum reorganization, especially those emphasizing the development of core curriculums, common learnings programs, fusion courses, and the like, clearly resemble efforts recently made at the college level to develop more thoroughly integrated programs.

The question of how to promote a greater unity in learning experiences has also long fascinated educational philosophers and practitioners. The concept has been discussed far more widely in recent years, especially in connection with arguments concerning the nature

² Gordon N. Mackenzie and Hubert Evans, "The Challenge of General Education for the Secondary Schools," *Journal of General Education*, I (October, 1946), 64-71.

³ Educational Policies Commission, *The Purposes of Education in American Democracy*. Washington: National Education Association, 1933.

of general education. Yet persons concerned with teaching the young have always consciously or intuitively been striving to achieve some measure of unified learning. Even our prehistoric forebears, for example, must have organized the teaching of their offspring in terms of survival values and conformity to the family and tribal mores. "Educational unity" had under these conditions to meet the grim test of sheer survival.

Throughout the development of western civilization, teachers have groped for some effective principle of unity to guide them in devising learning experiences. Sometimes they had to retreat to concentration on the "essential elements" only. At the court of Charlemagne in the ninth century, for example, the scholar, Alcuin of York, strongly advocated the improvement of written and spoken language on the part of the clergy throughout the empire, so that their prayers to the saints and the deity might be expressed correctly and clearly enough to be understood. Teachers of communication courses today would have much sympathy with the trials of the gentle Saxon scholar for they are still wrestling with the same basic problem, though in a different context.

Presumably one might, without too much distortion, trace principles of educational unity down the centuries: the medieval cathedral schools for training of clergy; the earliest universities at Salerno, Bologna, and Paris, for training in careers in medicine, law, and theology, respectively; the renaissance concentration on the humanistic values; the rationalism of the eighteenth century; and the classical heritage embodied in the curriculums of colleges and universities in America until relatively recent years.

But with the great multiplication of specialized knowledge, the increasing complexities of living, the mushrooming of college enrolments and the resulting academic mitosis of curriculums, higher education lost its natural unity. Some concerted efforts were made to recapture some form of it, however. The most familiar device adopted by liberal-arts faculties has probably been that of group requirements, a unity often more theoretical than real in view of the varied types of courses undergraduates have elected to "satisfy the requirements." Some institutions have moved away from the elective system to an outwardly more logical position of requiring specific courses as the minimum essentials of a liberal education.

In chapter ii, Taylor has distinguished three major divisions in the philosophical approach to general education — the rationalist, the neo-humanist, and the instrumentalist. Authors of other chapters may

have had some difficulty in accommodating themselves to the Procrustean bed which Taylor has laid out for them, although this classification is useful as a general framework for their discussions. Some writers, however, would doubtless make more than three major groupings, as did Eurich in the Thirty-eighth Yearbook of the National Society for the Study of Education, in which he set up six categories of unifying principles.⁴

ILLUSTRATIVE PROGRAMS IN ACTION

The test of any proposal for social or educational philosophy is in its operation. It is natural, therefore, to wish to see how the various convictions with regard to the nature and role of general education are reflected in practice. Some of the major differences in interpretation are noted and briefly described by McConnell. Although there are manifest difficulties in attempting a synoptic view, evidence of current practices may be drawn from observation, from reports in the literature, and from college bulletins.

The rationalist point of view in general education has had very vigorous, outspoken, and able champions in such persons as Hutchins, Adler, Van Doren, Barr, Nock, Maritain, and Sheen. One would, therefore, expect to find many programs based on this viewpoint. There are a number of Roman Catholic institutions operating on these premises, but there are very few secular colleges which might be labelled purely rationalist in philosophical orientation and in actual operation. The St. John's College curriculum was the shining example to which the rationalists pointed with missionary pride. But even at St. John's College, when its curriculum was in its purest classical state, some concessions were made to individual interests, and we may presume, to differences in ability also. If the rationalist approach is as unqualifiedly good as the eloquence and dialectics of its proponents would have us believe, it is strange indeed that many other liberal-arts colleges have not seen the light and followed the way.

The type of program which Taylor has classified as neo-humanist seems characteristic of the greatest number of general-education programs in the country at large. One rarely finds, however, a single philosophy reflected in practice, but rather a series of modifications.

Many faculties undoubtedly go through protracted mental struggles

⁴ Alvin C. Eurich, "A Renewed Emphasis upon General Education," *General Education in the American College*, p. 7. Thirty-eighth Yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago Press, 1939. This passage is quoted in the chapter by Corey, pp. 61-62.

and debates in attempting to work out a statement of premises and reasons for a particular approach. Few, however, have left as clear a record of the stages of their thinking as the University of Delaware.⁵ The conclusion at which the faculty there arrived, after giving in "double-entry" form the relative claims, advantages and disadvantages of the neo-humanist and the instrumentalist approach, was that the former seemed better suited to their staff, student body, and purposes.

An examination of the bulletins of many colleges suggests that other faculties have apparently reached the same conclusion. Yet, consciously or unconsciously, some concessions are made to what is certainly an instrumentalist point of view. Along with the usual courses in the social sciences, the humanities, and the natural sciences, with English and mathematics wedged in in various ways, one also frequently finds other courses which are strange company in a neo-humanist camp, namely, courses in personal orientation, home and family living, and health and personal adjustment, as well as a guidance program. The organization of this very volume, as revealed in the table of contents, represents this dual approach. Chapters v, vi, and vii show a neo-humanist cast, but chapters viii, x, and xi bring in instrumentalist considerations.

One may suspect that in many institutions there have been two forces at work, and these curriculums represent the inevitable compromises. The more conservative members of the faculty have undoubtedly leaned heavily toward a more traditional approach and, therefore, have thrown their weight toward courses organized exclusively in terms of the cultural heritage and classified bodies of knowledge. The less traditional members, undoubtedly influenced by the writings of Dewey, McConnell, McGrath, Hook, MacLean, Taylor, *et al.*, and particularly by the recommendations of the President's Commission on Higher Education, have doubtless made a successful case for the inclusion of a few courses in which the student rather than the subject content is the focal point. And so the most prevalent kind of program in liberal-arts colleges is really — in practice rather than in theory — a hybrid, for which Taylor has given us no label.

In singling out programs illustrative of their principles, the instrumentalists have many more examples available than the rationalists. Most of these are almost as well known as the St. John's College program, although they have not been the center of quite so heated a

⁵ "Report of the Committee on Educational Theory and Practice." Newark, Delaware: University of Delaware, 1949 (mimeographed).

controversy.⁶ Institutions which seem to partake of the instrumentalist philosophy include, among others, Stephens College, the General College of the University of Minnesota, Sarah Lawrence and Bennington colleges, with more recent converts including the Basic College of Michigan State College, Florida State University, and several of the state colleges in California, notably San Francisco State. The whole community-college development is also moving in this direction, with many California colleges in the forefront, especially through the junior college co-operative study of general education under the leadership of B. Lamar Johnson of Stephens College.

If an assiduous Ph.D. candidate were to undertake a doctoral thesis which would involve a division of all collegiate institutions offering general education into the three major categories outlined in Taylor's chapter, he would emerge with institutions classified along a continuum rather than in three neat clusters. On the extreme right, of course, would be some of the Catholic institutions and the St. John's College program, as it existed in its pristine form. Then would be found the College of the University of Chicago, Columbia College, and Harvard College. Spread all along the line thereafter would be other private and public liberal-arts colleges. At the left or liberal end of the grouping would be the various colleges which more nearly exemplify the Dewey philosophy of education.

It is appropriate that there should be this gradual merging of views rather than a sharp division. Our colleges reflect the cultural pluralism which is characteristic of American society and culture, and most college teachers would doubtless be more inclined to accept a flexible system of practices rather than a fixed one. This diversity also stems in part from the autonomy of colleges in America, wherein each institution determines its aims and its practices for itself. Thus, many varieties of programs emerge — a healthy sign, for it insures many centers of initiative and development. For these reasons, it can be predicted with reasonable assurance that there probably never will be one best system of general education, (in spite of rationalist dogma), since the pragmatist convictions of most Americans — laymen as well as professional educators — will impel them to maintain diverse programs suited to the varying abilities, aptitudes, interests, and purposes of college students and to particular regional or community needs in a democratic society.

Thus, in answer to the second question posed in the introductory

⁶ Sidney Hook, *Education for Modern Man*. New York: Dial Press, 1946; Mark Van Doren, *Liberal Education*. New York: Henry Holt & Co., 1943.

part of this chapter, one discovers that in translating into practice the philosophical concepts of general education in the literature there is an unequal distribution in terms of operating programs. There are relatively few secular institutions adhering closely to rationalist principles, with that of St. John's College carrying a disproportionately heavy burden of proof. The neo-humanist is probably the most prevalent as a type, although many of the recently established programs attracting national attention show strong instrumentalist leanings. And the trend in many junior colleges, particularly in those institutions functioning as community colleges, is toward instrumentalist practices.

It should be pointed out, however, that there may be a difference between philosophy and practice. An instructor in a rationalist or neo-humanist program might well take a current social problem or event as a springboard for discussion, or utilize student interests as a motivating factor. And the instrumentalists by no means disregard logically organized subject content, as many of the course descriptions in their catalogues will attest. Naftalin observes that the social-science teacher may take up his assignment "without a conscious commitment to any particular philosophical theory. . . . He greets his students in a variety of poses, now an instrumentalist, now a humanist, now a rationalist, depending on the point to be made or the idea to be explicated, and he sometimes harbors the suspicion that, even in those programs that are described as the prototypes of the warring camps, the ideological convictions are by no means clear and consistent and that there is more than a little foraging in the camps of the opposition."

GENERAL EDUCATION AND THE PRINCIPLES OF DEMOCRACY

The colleges are, in part, the instruments of the culture in which they operate. It is therefore pertinent, in appraising a new educational trend, to determine how near or remote its aims may be in relation to those of the social order of which it is a part. Even though we are no longer clear about the exact roles our students will play after they leave college, as Raushenbush and MacLean point up, we are nevertheless united in our dedication to educate them to the desire to preserve actively the freedoms of our democracy. In these critical days it is, therefore, especially important to determine the relationship between general education and the principles of a democratic society when the democratic ideal faces severe tests on a world-wide front.

Most collegiate institutions have been forced to make strenuous adaptations, physically if not educationally, to larger student bodies, especially in the period immediately following World War II. It is

evident that as a larger portion of the age group continues its education beyond high school, the colleges will be faced with an expanded and changing population. While a much larger proportion of students is now drawn from families of lower economic and social backgrounds than formerly, there is ample evidence to show that a distressingly large percentage of unusually competent high-school graduates still do not receive additional formal education.⁷ Furthermore, many adults may benefit greatly from further educational opportunity.

Wriston has cogently pointed out, in a previous yearbook of this Society, that there is some evidence to contradict the assumption that the student in American colleges in the past has been drawn wholly from the upper and professional classes.⁸ While this is undoubtedly true, because of the frontier nature which characterized much of our national development, the pattern of education provided in the liberal-arts colleges has been predominantly in the aristocratic tradition. By its very name and nature, liberal education was that befitting the "free man," or citizen in the Platonic sense, and ceased to be liberal as it assumed utilitarian aspects or otherwise deviated from the accepted tradition.

In the face of the problem of a changing clientele, the rationalists, and to a certain extent even the neo-humanists, face a contradiction of theory and practice. They are consistent so long as they maintain that the purpose of general education at the college level is to train the intellectually superior student, but insistence upon this position denies an opportunity for higher education to the great majority who possess other kinds of abilities but more modest intellectual capacity. Thus, they would provide education exclusively for an elite group. It is Hutchins' contention that "democracy does not require, however, that the higher learning should be open to anybody except those who have the interest and ability that independent intellectual work demands."⁹ This leads squarely into a Hamiltonian concept of democracy. At the risk of pressing the analogy too far, one might say that the rationalists

⁷G. L. Anderson and T. J. Berning, "What Happens to Minnesota High-School Graduates?" *Studies in Higher Education*, pp. 15-40. University of Minnesota Committee on Educational Research, Biennial Report, 1938-40. Minneapolis: University of Minnesota, 1941.

⁸Henry M. Wriston, "A Critical Appraisal of Experiments in General Education," *General Education in the American College*, pp. 297-321. Thirty-eighth Yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago Press, 1939.

⁹Robert M. Hutchins, *The Higher Learning in America*, p. 20. New Haven, Connecticut: Yale University Press, 1936.

represent a Hamiltonian view, to educate the elite; the neo-humanists a Jeffersonian view, to educate the larger group of potential leaders; and the instrumentalists, the Jacksonian view, to educate the "common man."

As a larger portion of high-school graduates go on into college, and that, barring a national catastrophe, is a definite trend, the nature of the college population will change still more, as Raushenbush and MacLean affirm. This means inevitably that, in the public institutions in particular, the student body of the future will come to resemble more and more the type of student population now characteristic of our public junior colleges. If the enrolment possibilities propounded in the report of the President's Commission on Higher Education are even approximated, the college offerings of the future will need to be geared in part to a different level of ability and performance. There may, therefore, be still more differentiated offerings to suit the greater spread of interests and abilities of these groups.

Elsewhere in this volume Havighurst indicates that there is grave concern over the possible social consequences of providing a college education for an appreciably larger proportion of the age group, thus creating a "white-collar proletariat." But if the kind of general education provided for these young people cultivates those skills, understandings, attitudes, and values required for effective personal and family living and responsible citizenship, it is difficult to understand that the saturation point could be so readily reached. In the last hundred years or so there have been many individuals who have predicted dire consequences if a much larger number of people were able to afford bathtubs, or telephones, or if the work week were reduced to fifty-two, or forty-eight, or forty hours, or if women were given the right to vote. In a country where the government at all levels rests upon the will and consent of the governed, an enlightened citizenry is surely the best insurance against tyranny in its many forms.

The question of preservation of democracy with its attendant problem of the most effective way of preparing young people for their civic responsibilities brings into sharp focus one of the most controversial issues in general education. This is a question of the extent to which a general-education program should encourage reflective thought primarily or whether it should also concern itself with the specifics of social action. The disagreement is well illustrated in this volume. In chapter vi, in his discussion of general education's concern with behavioral outcomes, Naftalin takes the position that it is primarily the function of the teacher of the social sciences to communicate to his

students an *understanding* of the forces that shape human personality and group life. On the other hand, Williamson, chapter xi, discusses the extracurriculum from the point of view of its serving as a laboratory for students to fortify their learnings through experience and to acquire skills in interpersonal relations and group action.

If the general-education movement as a whole has any social significance, however, it most certainly is that of democratizing higher education. This does not mean that there should not be full provision for training of the needed specialists and leaders. But it does most emphatically mean that opportunities should be greatly enlarged for more young people to get at least two years of college work, consisting not of fragments of unrelated subjects foundational to later specialization, but, rather, of a broad general education related to the needs and interests which they share in common with their fellow citizens in a democracy. True democratization of post-high-school education will require not an assembly-line technique, but, rather, wise over-all planning to insure the proper matching of educational programs to individual backgrounds, talents, and aspirations.

COURSE PRESCRIPTION IN GENERAL-EDUCATION PROGRAMS

There is more than a remote relationship between democratic ideals and the practice students may have in helping to plan their own learning experiences. The "elective system," however, has served as whipping boy for many critics of higher education. In attempting to view general-education practices as a whole, therefore, it would seem pertinent to inquire into the relationship between course prescription and the divergent philosophies of general education. Is there agreement that general-education courses should be required of all students? Does there appear to be a trend toward more or less prescription?

A number of different positions might be taken with respect to requirements in general education. Five might be distinguished as follows: (a) no requirements of any sort; (b) requirements of a distributive nature; (c) requirements among specified courses, with some election; (d) requirement of a total program; (e) requirements set in terms of outcomes, but many methods recognized for achieving them.

The practitioners of general education — at least the more liberal ones — face a dilemma in deciding whether certain parts, or perhaps all of the program, should be prescribed. Since the instrumentalists believe in suiting educational experiences to individual needs, it would be inconsistent for them to require a common program of studies. But the temptation is indeed strong to advocate a well-designed course or

group of courses for practically all the students in a given college, since this offers a ready means of providing for every student the learnings for which it may be assumed they have a common need.

The rationalists naturally have no such qualms. Because of their adherence to a philosophy of fixed values and because of their conviction, as voiced by Hutchins, that human nature is at all times and in all places essentially the same, it follows with clear and impelling logic that the curriculum should be the same for all. And the appraisal of attainment may also be according to a single standard. Other advocates of the rationalistic position take this same position, either explicitly or implicitly, in the various statements cited by Taylor on this point.

The neo-humanist position resembles that of the rationalists with respect to required studies. The neo-humanist concentration upon the literary, historical, and philosophical development of Western culture, and the intellectual values accruing from the collateral study of the chief methods of acquiring knowledge in the major fields of learning, leads them naturally to the side of prescription. It is interesting to note that when Harvard College first set up its program according to the principles stated in the famous report, six of the student's sixteen courses required for the Bachelor's degree were to be in general-education courses with distribution of at least one from each of the three major divisions. After a few years of trial, the program has become even more closely prescribed. Probably one of the best known neo-humanist programs in which practically all work is prescribed is that at the College of the University of Chicago, where all students must enrol in fourteen prescribed courses or demonstrate by their performance on examination that they have already reached the required standard of proficiency.¹⁰

When courses in general education were peripheral or supplementary to the regular liberal-arts program, there was naturally some hesitation, not all of it voluntary, in making such courses required. But with the growing strength of the movement there is a significant trend toward increased prescription.¹¹ This most commonly takes the form of requiring at least one general course in each of the three divisional areas of the social sciences, the humanities, and the natural

¹⁰ *The Idea and Practice of General Education: An Account of the College of the University of Chicago*. Prepared by Present and Former Members of the Faculty. Chicago: University of Chicago Press, 1950.

¹¹ Earl J. McGrath, "General Education: A Review," *Journal of General Education*, II (July, 1948), 267-77.

sciences. The latter requirements are fulfilled in some institutions by taking a general course in either the biological or the physical sciences; seldom in both. Courses which really integrate the physical and biological sciences are rare indeed, and a fairly common substitute is to provide a year course consisting of one semester devoted to each of the two major natural-science areas. Some form of communication course is often a requirement also. Mathematics, however, occupies a less common and less assured position.

In terms of the proportion of a student's total program, requirements run the entire gamut. At Florida State University, for example, the equivalent of approximately half the baccalaureate program — eighty-five quarter hours for every student — is mandated. In the College of Science, Literature, and the Arts of the University of Minnesota, there is a distributive requirement for which general-education courses may be used wholly or in part. No general-education courses are specifically required. They are, however, very popular on an elective basis.

McGrath has given an interesting analysis of the difference between the educational assumptions underlying the earlier courses in general education and those currently offered.

The basic philosophy in those original courses involved two false assumptions: the first, that a vast range of information is the hallmark of an educated mind; the second, that transfer of training was impossible. The first of these, a vestige of the days when intellectual giants like Bacon mastered all extant knowledge, has been responsible for much memorized learning of little value in living in a rapidly changing world where a high degree of adaptability is essential for survival. Knowledge is not wisdom; facts are not power; utilized without judgment and discrimination they cause much mischief. The cultivation of the capacity to use knowledge is the proper objective of institutions of higher education.

The second assumption ignores the findings of psychology. If the human mind could not generalize its experience and apply what is learned in one situation to other similar but somewhat novel circumstances, then of course the student would be required to master all the detailed subject knowledge needed in his later life. But this is not so. The mind does conceptualize its experience and the well-educated mind does so more easily and more comprehensively than the uneducated mind. Modern psychologists have shown that although transfer is not automatic, it does occur; when it is made a specific objective of instruction, the student learns to generalize his experience.¹²

¹² Earl J. McGrath, "General Education: Theory and Practice," *General Education: A University Program in Action*, pp. 44-45. Edited by W. Hugh Stickler, James Paul Stoakes, and Louis Shores. Dubuque, Iowa: Wm. C. Brown Co., 1950.

The new courses, however, are selective in nature and emphasize the methods of the various disciplines as well as their characteristic problems and content. Thus, the student is assumed to be better prepared to grasp the significance of other and newer developments in these fields than if he were crammed full of a wide range of factual data which would soon be outdated and forgotten.

In view of this aspect of course development, there appears to be a sounder argument for prescription. And if current trends continue in the same direction, it is likely that an increasing portion of a student's time will be devoted to general-education studies in most liberal-arts programs. Course prescription is implicit in the philosophical position of the rationalists and the neo-humanists. The instrumentalists, however, are more likely to continue favoring making many courses available to allow students to take diverse routes to the desired educational goals, prescribing only the outcomes to be achieved. As Brumbaugh and Pace point out in chapter xiii, objectives are coming more and more to be stated in behavioral terms, without direct reference to specific courses.

GENERAL EDUCATION AND THE INTEGRATION OF LEARNING

Significance of the Problem

One fundamental consideration in all general-education programs—and one related closely to that of the philosophical basis of unity—concerns the integration of learning. Throughout almost all the chapters of this volume the reader will note a recurring emphasis on its importance. McConnell discusses the problem of integration at some length and characterizes “integrated education” as the kind sought through “an attempt to determine the degree to which particular disciplines, such as physics or economics, can be brought together into a more inclusive and unified system through pervasive ideas, principles, or methodologies.” Taylor notes this stress as a distinguishing feature of all programs of general education; Corey alludes frequently to the integrative aspects of learning; Faust, Naftalin, and Heil point up the need to consider continuously, in the planning and teaching of courses, the relationship among the broad fields of learning; Lloyd-Jones discusses the interaction of personnel activities and general education; Williamson underscores the necessity of integrating the extracurriculum as part of the student's total learning situation; Eckert stresses continuously the significance of evaluating as fully as possible the total impact of the student's learning experiences; Brum-

baugh and Pace indicate the administrative aspects of the need for reorganizing fields of instruction; and Van Ek points out that the broadening and integrating of the curriculum is one of the major tasks facing faculties developing a program of general education.

This concern about integration is by no means confined to the college level. For many years teachers, administrators, and research workers at the secondary level have studied and experimented with a view to making pupils' classroom learning more meaningful to them. As Corey indicates, high-school programs usually reflect a more realistic understanding of the way boys and girls learn, probably because the high schools embrace a broader range of interests and abilities and are less bound by tradition than the colleges. Numerous innovations have been tried, principally in the junior high school, which have been variously referred to — scornfully and otherwise — as the core curriculum, common learnings, integrated studies, fusion, the unit system, the child-centered school, the activity movement, and other such terms. Many of these experiments were launched under the aegis of the Progressive Education Association in the 1930's.

Broadly conceived, curricular integration has two different aspects, each of which is markedly significant in its own way. The first of these may be considered as horizontal integration, which is concerned with the problem of relating concurrent learning experiences into a meaningful pattern. The second is vertical integration, which deals with the problem of relating new learning to previous and sequent learning in a subject or area of experience. The following discussion is naturally limited to curricular provisions which are made to help promote integration of learning experiences, although the actual accomplishment of integration is really a behavioral affair, which the student himself must achieve.

Horizontal Integration

At the present time, college faculties developing and teaching courses in general education are more actively concerned with horizontal than with vertical integration, since vertical aspects have long had attention in concepts of course sequences and prerequisites. Thus, Faust, Naftalin, and Heil, in chapters v, vi, and vii, as previously noted, point out the importance of co-ordinating the objectives and content among the various divisional areas. They are properly concerned that teachers of general-education courses should know what their colleagues in other fields are doing.

The rationalist and neo-humanist positions with respect to hori-

zontal integration, as in several other practices, are relatively similar. In these systems the integration is planned for the student by means of curricular reorganization, the institution changing its offerings ordinarily from departmental to divisional ones. The best thinking and the experience of the faculty are drawn upon, and great care is exercised with regard to the construction of reading lists, the planning of the work in each divisional area, and their interrelationships. As Schwab remarks about the science courses at Chicago:

The three-year science program exists in organic connection with other parts of the College curriculum. Its structure and its function are, therefore, partly determined by the whole curriculum. In day-to-day practice, for instance, the discussion of materials in the science program takes cognizance of work which is going on serially or simultaneously upon related matters in the course in history, in the course in the interrelationships of the fields of knowledge, and in the programs of the humanities and social sciences.¹³

The assumption underlying the rationalist-neo-humanist approach, as Corey indicates, is that taking "well-ordered and carefully organized courses will result in a well-organized and unified education." As noted later in this section, upper-level integrating courses are sometimes offered to provide an additional means of pulling together the over-all relationships of the separate disciplines or areas which the student has studied.

The instrumentalist position is so well known that it requires little discussion. Since the instrumentalist views the educational process in a relativistic and empirical light, he proposes to capitalize upon many varieties of learning experience and to consider the educational needs of students on an individual as well as a group basis. His integrative factor is the individual student, as Williamson states, and the instrumentalists subscribe fully to the view expressed by Corey that "in the last analysis it is the way the learner organizes his own experience that counts rather than the organization imposed by other people upon the subject matter the student learns." For this reason colleges holding an instrumentalist philosophy provide many different agencies to assist the individual student in selecting the most desirable studies and activities for his maximum intellectual, emotional, and social development. Such agencies include a broad range of student personnel services, counseling and advisory systems, and student activities. More needs to be done, however, to work toward some greater measure of curricular integration of the horizontal type and not leave the task

¹³ Joseph J. Schwab, "The Three-Year Program," *The Idea and Practice of General Education*, *op. cit.*, p. 149.

wholly to the student. Evaluation studies in instrumentalist programs, as Eckert maintains, test not alone for knowledge of subject matter and intellectual skills but also for evidences of the extent to which the individual has applied his school learnings to his life activities.

Vertical Integration

High-School and College Articulation. At the elementary and secondary levels, a tremendous amount of time and effort have been devoted to discovering the proper grade placement of materials of instruction, in order to provide an effective sequence of learning experiences. But too often that concern has stopped with the Senior year of high school. Far too many college teachers have behaved as if they had never heard of this idea, or hearing it, did not believe it. For they have frequently started Freshman classes as if the students in the course had no previous contact with their subject. While this might be true in foreign languages and higher mathematics, it certainly does not hold for the social sciences, English and literature, or to some extent, the natural sciences. Yet these same professors have been quick to set up a string of prerequisites for later work in their own subject field, making it possible for only the initiated to progress to the privileges of specialism.

Fortunately, this lack of articulation between high school and college has been receiving careful attention, and several promising efforts have been made to improve the situation.¹⁴ It is especially important for teachers of first-year general-education courses in college to familiarize themselves with the learning experiences their students have had in high school, since the concern of the latter is also largely with general education.

The administrative device of the 6-4-4 plan avoids the special difficulties caused by an abrupt break between the twelfth and thirteenth years, and extravagant claims are made for this particular form of organization.¹⁵ But most liberal-arts colleges have neither the poten-

¹⁴ Ralph W. Tyler, "Admission and Articulation Based on Study of the Individual," *New Directions for Measurement and Guidance*, pp. 1-15. American Council on Education Studies, Vol. III, August, 1944. Washington: American Council on Education, 1944. See also, Ruth E. Eckert, "High School-College Cooperation," *NEA Journal*, XXXVIII (February, 1949), 96-97.

¹⁵ John A. Sexson and John W. Harbeson, *The New American College*. New York: Harper & Bros., 1946. See also Leonard V. Koos, *Integrating the High School and College: The Six-Four-Four Plan at Work*. New York: Harper & Bros., 1946.

tialties nor the desire to adopt such a scheme, and, therefore, the problem of the high school-college gap will remain a pressing one.

Some very promising practices are emerging with respect to the use of placement examinations as a basis for admission to certain levels of work in college — the G.E.D. tests are examples of this device — but much further work needs to be done to make the articulating processes really functional and effective.

General-Education Courses as Foundations for Specialized Studies. But once the student successfully clears the hurdle from high school to college, there is still the problem of articulating his lower division general-education courses with specialized courses in the upper division. This touches upon the suitability of a general-education course as a substitute for the departmental introductory course for the student who intends to major in that area. This, as Van Ek states, is one of the questions which faces any faculty working out its own program of general education. In some institutions, as at Drake University, the staff has had sufficient courage, after trying out general-education courses and finding them satisfactory, to drop the majority of departmental introductory courses. At some of the large universities, where the grip of specialism is stronger, the departmental introductory courses are retained for the potential major, although the same staff members teaching these courses may also be teaching a broader general-education course for nonmajors. Some upper-division professional schools, suspicious of any innovations, still refuse to accept general-education credits as part of the specified group requirement for admission, thus throwing out another sea anchor to slow the progress of curricular experimentation.

Very little evidence is available, as Eckert shows, to buttress claims that departmental introductory courses are definitely superior to those in general education as a foundation for subsequent specialization. One experiment conducted at the University of Minnesota by Brown indicated that in one area, at least, there was no appreciable difference.¹⁶ But this sort of problem needs the most thorough exploration to help faculties clarify their thinking with respect to the various purposes which general-education courses may serve. It is encouraging to note that there may be a more liberal trend, since McGrath states that "many of those who have organized such courses

¹⁶ Clara M. Brown, *A Study of Prerequisite Sciences and Certain Sequent Courses at the University of Minnesota*. Committee on Educational Research. Minneapolis: University of Minnesota, 1941.

for nonmajor students have begun to suggest that a similar course would be superior to the usual elementary instruction even for future specialists in the field."¹⁷

One may suspect, however, that substantial progress will be made in attaining better integration only if staff members devote considerable attention also to the possibility of redesigning the sequent courses.

Upper-Level Integrating Courses

One feature related to vertical integration, which is receiving increasing attention, is the development of some sort of integrating or synthesizing course as a capstone to an institutional program of general education. Brumbaugh and Pace note this as a current trend in liberal-arts colleges. A few examples could doubtless be considerably extended. The University of Buffalo conducts a "Division of Science Seminar" as a capstone course for students majoring in either the physical or biological sciences. The College of Science, Literature, and the Arts of the University of Minnesota provides an upper-level "Proseminar" for students who have taken the lower division courses in the humanities. The Pennsylvania College for Women offers a capstone course in philosophy for Seniors. The University of Louisville provides a Senior-level, year course for majors in each of the three divisional areas. The humanities course is titled "Principles of Cultural History," that in the social sciences, "Great Social Thinkers," and that in the natural sciences, "History and Philosophy of Science." The experience of institutions which have developed such a course or courses will undoubtedly stimulate a wider experimentation of this type, since many faculties teaching in programs of general education sense the need for "something to tie it all together."

Probably the best known examples of capstone courses are the two offered in the Senior year in the College of the University of Chicago, called "History of Western Civilization" and "Observation, Interpretation, and Integration." The latter, according to the bulletin, is a one-year course designed to equip the student with knowledge and intellectual disciplines necessary to provide a meaningful integration of the fields of knowledge which are the subject matter of the divisional-area general courses. In discussing this course O'Meara says:

The faculty realized that, over and above the program of general courses in the natural sciences, the humanities, and the social sciences, the students needed a treatment of intellectual problems, of both practical and theoretical

¹⁷ McGrath, "General Education: Theory and Practice," *op. cit.*, p. 47.

importance, which could not be considered adequately in the courses restricted to particular ranges of learning.¹⁸

Divergent Practices in Vertical Integration

In vertical as well as horizontal integration, the rationalist and neo-humanist positions are close together. The basis of the approach in both philosophies is the careful planning by the faculty, as noted in the quotation above, of the sequence of materials which they feel is best suited to attain their objectives of general education. This ordinarily means a logical organization of subject matter as opposed to what has been called a psychological organization. At St. John's College this took the form of a chronological approach to the great books, starting in the Freshman year with those of greatest antiquity, and moving each successive year toward more modern works. The "Contemporary Civilization" course at Columbia University uses an historical approach to develop an understanding of present-day society and its problems.¹⁹ At the College of the University of Chicago there are three sequential one-year courses in each of the divisional fields of the social sciences, the biological sciences, the physical sciences, and the humanities.

Since the instrumentalists believe in planning an educational program with reference to student needs and the realities of our present society, it follows quite naturally that they are not satisfied with the traditional logical organization of subject matter. Therefore, many courses in such programs capitalize on student interest by means of a psychological approach, wherein they may use a current problem or situation as a starting point in moving into a subject-matter field. This tendency is what Hutchins decries as "presentism." With its constant reference to student needs in planning learning experiences, the instrumentalist program has, as Corey states, also earned the good or bad — depending upon the speaker's point of view — appellation of "student-centered." •

Thus, in summary, it may be said that provisions for integration show a sharp contrast between those programs based upon a rationalist-neo-humanist point of view and those stemming from an instrumentalist philosophy of the nature of truth, of learning, and of the learner.

¹⁸ William O'Meara, "Observation, Interpretation, and Integration," *The Idea and Practice of General Education*, *op. cit.*, p. 233.

¹⁹ Committee on Plans, *A College Program in Action: A Review of the Working Principles at Columbia College*. New York: Columbia University Press, 1946.

The former, operating from a set of relatively fixed values, consider that integration is best achieved through the systematic and logical organization of the curriculum. Their point of emphasis is the subject-matter content. The instrumentalists, however, drawing upon the findings of experimental psychology, attempt to provide learning experiences which will be meaningful to the learner, and which may differ from one instance to another. They emphasize the importance of personnel services, as Lloyd-Jones describes in her chapter, in helping the student to capitalize as fully as possible upon his various experiences including both curriculum and extracurriculum. Their point of focus is the individual student, helping him toward the attainment of objectives in differing degree and through a variety of means.

THE RELATIONSHIP BETWEEN GENERAL AND VOCATIONAL EDUCATION

One of the most insistent problems in the entire educational field, secondary, "tertiary" (to borrow Stoddard's phrase momentarily), and professional, is the relationship between the so-called cultural and liberal studies and those which deal with the more practical aspects of earning a living. The American student comes up against this problem in his high-school years, when many are strongly inclined to enrol in practical courses, such as shop or typewriting, as a hedge against unemployment. However, many such students later discover, to their dismay, that they are often barred from college, even if a change of economic circumstances would provide for their going on, because of a lack of the requisite number of "Carnegie units."

The student who may enter college, but who must limit himself to one or two years, finds little opportunity, except in the junior colleges — and not always there — to secure a technician or semiprofessional type of training which gives him some general education coupled with preparation for immediate employment. The division between specialized and general studies in the professional schools is also a phase of the same contest. The highly specialized courses in engineering, medicine, law, dentistry, and education may be just as definitely vocational in form and spirit as are the high-school and lower-division courses in applied subjects to which the term "vocational" is more often given. Even though the current trend in the professional schools is toward encouraging students to take a larger portion of their work in general or liberal studies, as Brumbaugh and Pace say, there is still a strong element of opposition among their faculties, many of whom feel that the extra year or so should be devoted to more intensive specialization. At best, in most of those programs which com-

bine the two elements, the relationship between them is incidental; at times, it is even openly hostile.

Liberal or general education and vocational education have tended to become sharply compartmentalized in most educational institutions. This distinction is one inherited from the concepts held by the ancient Greeks and derived from their social and economic structure and conditions, although the division is in many ways an artificial one. This artificiality has been sharply scored by Wickenden, who says:

We sin against youth when we undertake to separate culture from skills of hand and make it a mere matter of erudition. The result is all too often a feeble dilettantism or a sterile scholasticism. You get too many people who know the patter of the art world or the music world or the theater, but who do not paint pictures or compose music or produce plays. You get too many arid monographs on historical or critical minutiae of literature and too little writing of poetry or drama or biography or fiction. Too often this is mis-called *culture*, a self-righteous word which well-rounded people are inclined to avoid. In the great creative epochs of the past there was no such separation of culture from work.²⁰

And yet, even in the college program it would be difficult, if not impossible, to categorize all courses as liberal or vocational. The question of student orientation and purpose is in many instances the determining factor. Consider the diversity of purposes which might be served by the same course in "Related Arts." For one student, who wishes to learn something about the arts but does not expect to take any additional courses in that field, this experience becomes part of his general education. For another student seated next to him, perchance, this course is the beginning of a sequence leading to specialization in the fine arts. For still another, who may be planning on a career in interior decorating, this is a vocational course of highly immediate and practical value.

The question of "vocationalism" in higher education may be explored by the intellectual purists, but it must be faced squarely by the colleges if we are to avoid what Whitehead calls the "fatal disconnection" between formal subjects and life. Numerous studies and estimates have indicated that for every professional-level job, such as that of the professional engineer, there are about five others at the technician or semiprofessional level which require one or two years of formal education beyond high school but not the traditional four years of college. Yet this need is not being met. In the state of Minnesota,

²⁰ William E. Wickenden, "Shall Higher Education be Expanded on the Technological Pattern?" *Journal of General Education*, I (April, 1947), 181.

for example, it has been calculated that enrolment in terminal vocational programs in the state public junior colleges in 1948 could have been expanded twenty times before the estimated demand would be met for workers with this type and level of training.²¹ The junior colleges in California and the technical institutes in New York State, however, are doing a more satisfactory job in this respect.

Points of View toward Vocational Education

The attitude of the rationalists toward vocational work at the college level is well known. Hutchins has castigated it vigorously as follows:

Vocationalism leads, then, to rurality and isolation; it debases the course of study and the staff. It deprives the university of the only excuse for its existence, which is to provide a haven where the search for truth may go on unhampered by utility or pressure for "results."²²

Although the neo-humanists are not as forthright in their denunciation of practical studies, their emphasis upon the cultural heritage and methods of investigation in the liberal disciplines leaves little place for vocational education as such.²³ The instrumentalists, however, with their pragmatic orientation, concern for broadening educational opportunity, and emphasis upon individual development and social application, are committed to providing vocational guidance and are becoming increasingly concerned with education for occupational efficiency. The publication by the Educational Policies Commission of the volume, *Education for ALL American Youth*, underscored this interest for the secondary level and beyond. The Report of the President's Commission on Higher Education made explicit recommendations for further development of terminal vocational programs, especially in the junior or community college.

Student Work Experience and Vocational Education

In considering the place of vocational education in college programs, a distinction must be made between student employment and formal training for a job. In both public and private institutions, a

²¹ H. T. Morse and John A. Butler, "Survey of the Need for Terminal Occupational Curriculums," *Higher Education in Minnesota*, pp. 145-63. Minnesota Commission on Higher Education. Minneapolis: University of Minnesota Press, 1950.

²² Hutchins, *op. cit.*, p. 43.

²³ W. H. Cowley, "Education for the Great Community," *Journal of General Education*, I (October, 1946), 22-23.

fair proportion of students have defrayed at least part of their expenses by working outside of class hours. This work is usually purely incidental in most colleges and is regarded only as a *modus vivendi* for the student, having little significance in relation to his classroom experiences or his ultimate educational or vocational goals. The Antioch plan, on the other hand, attempts to provide, when possible, a more systematic relationship. While an effort is made there to capitalize upon the student's work experience as vocational preparation or training, the main concept is that the work experience as such is a maturing factor and is regarded as part of a well-rounded liberal education.²⁴ Institutions which conduct a co-operative work plan as part of a vocational sequence provide for a much more direct relationship between the job and the particular curriculum the student is following. A similar relationship prevails at Bennington College, for example, where both general-education values and specialized vocational interests of the students are served by the activities in which they engage during the "nonresident winter term."²⁵

In 1939 Ellingson characterized the various attitudes toward outside work activities in four categories as preparatory, sustaining, supplementary, and basic, depending upon the extent to which they were systematically or only incidentally related to the vocational objectives of the student.²⁶

It is evident that too many institutions regard the work experience of the student as a necessary but unfortunate intrusion upon the time he devotes to his studies. Much more attention, therefore, needs to be devoted to the problem of relating more definitely the classroom learning and the practical values of job experience if the full potentialities of both are to be realized.

Need for Changes in Attitudes

Most faculties with liberal-arts training look upon vocational education with a distinctly patronizing, if not openly hostile, air. Yet, it is difficult for many of them in the liberal-arts college who have not sat

²⁴ Algo D. Henderson and Dorothy Hall, *Antioch College: Its Design for Liberal Education*. New York: Harper & Bros., 1946. See also W. Boyd Alexander, "General Education in a Work-Study Plan," *Journal of General Education*, I (July, 1947), 287-94.

²⁵ Barbara Jones, *Bennington College: The Development of an Educational Idea*. New York: Harper & Bros., 1946.

²⁶ Mark Ellingson, George Wilson Hoke, and L. L. Jarvie, "Occupational Motivation in General Education," *General Education in the American College*, *op. cit.*, p. 295.

around the conference table with vocational educators to grasp the reciprocal point of view. The great majority of vocational educators, stung by the inferior status frequently assigned to their field and to them as its practitioners, scorn the "professors" as incompetent theorists, cloistered in ivy-covered halls, far from the practical realities of the workaday world. There is sharp and acrimonious comment about the "watering down" of vocational programs through the inclusion of "impractical and theoretical" courses in general education.

The vocationalists have their own answer as to how the values for general living may be promoted through vocational programs designed to prepare the student for making a living. They state that one way of attaining these objectives may be through the inclusion of "related courses," such as report writing, shop mathematics, and employee relations. Another way in which such values as good citizenship, personal development, co-operativeness, and communication may be realized, they say, is through the insistence upon these factors in the conduct of the vocational courses themselves. That is to say, the instructor would insist upon such "good-citizenship" characteristics as punctuality, neatness, respect for the opinion of others, care of public property, democratic relationships, and the like. And finally, similar values and others may be developed through an incidental or planned program of out-of-class activities including assemblies, clubs, parties, and student committees.

The extreme point of view among both the liberal-arts purists and the more insistent vocationalists is surely to be deplored, wherein they remain divided from each other by a wall of mutual contempt. If a really effective working relationship between them is to be evolved, changes of attitude and curriculum concessions will have to be made on both sides. The "professors" will have to realize that vocational interests are powerful motivating drives, that work-training and experience can provide insights which may make liberal studies more meaningful, that the snobbish distinction between education for living and education for making a living is a specious one. For their part, the vocationalists must be brought to see that general education is a far broader and richer concept than shop English, that emphasis upon technical proficiency in a course leaves little time or attention for the incidental "citizenship" values, that the providing of extraclass activities is not productive of many general-education outcomes if these experiences are not capitalized upon educationally, that critical-mindedness, insight into the individual's relation to the governmental process and awareness of the implications of social trends are the

imperatives of education for the preservation of a democratic society.

There is encouraging evidence to indicate that the time-worn breach between liberal and vocational education is being healed.²⁷ Educators are coming to see that there is a complementary relationship between them. The vocational courses capitalize upon the strongly expressed desire of students to derive some "practical values" from their college education. The courses in general education, in addition to their usual functions, may also provide a form of employment insurance for the worker. They provide the balance, the perspective, and the deeper understandings which contribute to success on the job — on *any* job. In so far as the worker more fully understands the significance of the specific operations he performs in the total pattern of business or industry, his own activities become more meaningful to him, and it has been demonstrated by numerous studies that such understanding contributes to improved effectiveness of the workers. Other studies in vocational adjustment have indicated that the most important factor in job failure among beginning workers is not lack of technical proficiency or "know-how" but, rather, failure to make adequate adjustment to their fellow workers and to the nonspecialized aspects of the employment situation. From these and many other evidences it should surely become increasingly clear that general and vocational education should not be viewed as mutually exclusive or antithetical, but rather as integral and complementary parts of a whole and increasingly significant pattern of learning experiences at all levels of the educational process. As a result of this drawing together, attention may well shift from a consideration of the relative *proportion* of general and vocational courses at various levels, from the junior college to the professional school, to that of the optimum *relationship between* these courses to provide the most effective and meaningful education for the student. While the departmental organization historically characteristic of colleges tends to make the rapprochement more difficult, the broader administrative structure required by the functions of general education, as Brumbaugh and Pace observe, may in time open the way to continually improving relationships. This task is one which is particularly a challenge to the junior or community colleges and to the increasing number of liberal-arts colleges experimenting with programs aiming to provide direct occupational competency and employability.

²⁷ See, for instance, Arthur B. Mays, "The Relationship between General and Vocational Education," *Journal of General Education*, II (January, 1948), 156-60.

THE BALANCE SHEET: A CRITIQUE OF THE GENERAL-EDUCATION MOVEMENT

There is, as yet, disquietingly little evidence, as Eckert points out in chapter xii, to validate the claims of any particular type of general-education program, or even of general-education courses as distinguished from the more traditional types of courses. Increasing attention is being given to assessing the true value of general-education courses, however, as illustrated in the many proposals for experimentation and research described in Eckert's chapter and detailed in a recent publication, of which the writer served as editor.²⁸ Any thorough evaluation of general education as such, therefore, must await a more comprehensive and critical study of its achievements. It may be possible, nevertheless, to assess tentatively the general impact of this movement on American higher education.

Positive Contributions

Although there have been innovations and adaptations in higher education in all periods, it is probably not an exaggeration to say that the general-education movement has had a tremendous effect in breaking down traditional thinking with respect to the form and functions of college instruction. It has had a profound influence on the actual character of Freshman-Sophomore programs. It has had a liberalizing effect on specialized studies. It has even penetrated the citadels of advanced professional education and has influenced a large number of intelligent laymen as well as professional educators to think quite differently with regard to the components and purposes of college instruction. It has been an effective catalyst, in other words, in stimulating constructive thought about instructional programs.

The general-education movement has had a wholesome effect, too, in directing attention to the needs of the nonmajor students, or of the student who may not remain in college more than one or two years. Instructors in departmental introductory courses have, in the past, tended to gear their course content and procedure primarily to the needs and interests of the potential major.²⁹ It is indeed high time that greater consideration should be given to the systematic prepara-

²⁸ H. T. Morse, Editor, *General Education in Transition: A Look Ahead*. Minneapolis: University of Minnesota Press, 1951.

²⁹ T. R. McConnell and Ruth E. Eckert, "The University Curriculum Survey," *Biennial Report of the Committee on Educational Research, 1940-42*, pp. 32-64. Studies in Higher Education. Minneapolis: University of Minnesota, 1942.

tion of young people for their common roles in our democratic society and for the layman's intelligent understanding and appreciation of the arts and sciences.

It may not be too extravagant to maintain that the general-education movement has also resulted in a re-emphasis on ethical and spiritual values, particularly in secular institutions. Most statements of general-education objectives include at least one somewhat similar to that in the President's Commission Report: "To develop, for the regulation of one's personal and civic life, a code of behavior based on ethical principles and consistent with democratic ideals."³⁰ This implies a very different attitude from the behavioristic and mechanistic philosophy, often the frame of reference within which offerings in many institutions were conceived.

The general-education movement has also vastly accelerated studies and experimentation in the redesigning of course offerings and the application of a greater variety of instructional methods. An important by-product of such experimentation is the professional stimulation it provides for members of a teaching staff.³¹ Co-operative effort on what often becomes a college-wide project usually exerts a beneficial effect upon faculty morale.

This experimentation has naturally involved liberal-arts faculties in questions and problems more customarily left to their colleagues in the field of professional education. It is an interesting and enlightening experience to hear teachers in liberal-arts fields discussing seriously and intently such pertinent problems as motivation, student needs, comparative instructional methods, and "new" techniques of evaluation. Many of these liberal-arts staff members are now coming to recognize that their colleagues in education have had greater experience with questions of this kind and are, therefore, ready to be guided in part by that experience. This rapprochement, while it still has far to go, is indeed a healthy and desirable trend in higher education.

A final positive contribution of the general-education movement has been toward a greater democratization of higher education. While

³⁰ President's Commission on Higher Education, *Higher Education for American Democracy*, Vol. I, *Establishing the Goals*, p. 50. Washington: Government Printing Office, 1947.

³¹ Russell M. Cooper, "Faculty Adventures in Educational Planning," *Journal of General Education*, II (October, 1947), 35-40. The effects on participating faculties in the Co-operative Study in General Education are described in *Co-operation in General Education*. Washington: American Council on Education, 1947.

the more intellectually exclusive types of general-education programs would not admit a much wider range of student abilities and interests, the trend in the majority of the public institutions is to broaden educational opportunity by providing for many students not now served by our colleges. With the quickening of interest in general education, we may in time witness as startling an increase in the average educational level of the population as a whole as occurred in the years between the first and second world wars.

Danger Points To Be Watched

While the over-all effects of the general-education movement on colleges and universities have been distinctly beneficial, certain limitations should be noted and watched with care. It should be particularly the responsibility of the proponents of general education to identify and guard against its weak points. The most healthful criticism of the movement may well be that which comes from within. It is the writer's conviction that more of this humble spirit, for example, would have strengthened the position of many progressivists in the lower schools in the heyday of their movement.

Much of the now extensive literature on general education is quite properly concerned with curricular innovations. In some instances, as in the Harvard Report, so much attention is devoted to subject-matter reorganization that one looks in vain in the table of contents for a section concerned with the student. The student, of course, is there by implication in many such writings, very much like the "economic man" of the classical economists. But there may be a real danger that the student may be lost to sight. "Liberal studies—the humanities and the sciences alike—easily fall prey to all sorts of pedantries," states McConnell in the opening pages of this volume, "unless teachers strive earnestly to make them relevant to human needs and values, to bring them to bear on students' own problems and the crucial issues of their age."

It has been said that educators are "lovers of the plains." Certainly more time and effort have been expended in elementary and secondary schools in boosting the laggards over the fences than in helping the gifted to reach the stars. A large amount of attention in many programs of general education is devoted to the development of the common learnings desirable for effective participation in a democratic society. This need not preclude, however, the expectation of higher standards of achievement even in core-type programs.

Care must be exercised to identify and encourage those students

with special abilities and interests so that concentration on the common outcomes may not result in promoting wholesale mediocrity at the expense of developing the special talents of the gifted. The pronouncement of a special committee of a recent conference on youth education has an important bearing on this problem:

Students will differ in the extent to which they attain many of the skills and abilities involved in general education. The common core of abilities which define human nature can be attained to a high degree by some and to a lesser degree by others. For example, most students can be expected to learn how to express ideas simply, correctly, and with reasonable effectiveness, but some should be able to attain real felicity of expression. All students can understand relatively simple social relationships or scientific concepts. A smaller number can be expected to gain insight into complex social or scientific problems.³²

Another danger point to be watched concerns the possible deterioration of the instructional staff. It is indeed true, as Bigelow states, that the success of any program depends largely on the teachers. Faculty members teaching exclusively in general-education programs at the lower-division level may, in time, face intellectual stagnation. In those institutions where the general-education faculty is self-contained, additional intellectual stimulation for them must be fostered through creative activity, research, or work with professional organizations. While it is most certainly true that some involvement in designing and teaching courses in general education is itself a stimulating experience, care must be taken to see that these staff members also have ready and continuous access to other wellsprings of intellectual inspiration.

A difficulty related to the need of the faculty for intellectual stimulation concerns the excessively large classes characteristic of many general-education courses, particularly in the public institutions. Some individuals have confused general education with mass education, doubtless because the two trends have coincided in the last two decades or so. But the two are by no means the same. The persistence of large classes need not prevent curricular and instructional experimentation, though smaller classes are definitely more desirable for such purposes. It is interesting to note that even in those institutions, like the General College of the University of Minnesota, where very large classes have from the beginning been the rule, there has nevertheless been continual experimentation to develop an improving pattern of general education. But in this and similar institutions where mass education

³² "A Comprehensive Nation-wide Program of Education for Secondary and Post-Secondary Schools," *Teachers College Record*, XLVII (January, 1947), 204-24.

is a continuing challenge, one must take care to distinguish between a staff member's occasional weariness from coping with large numbers of students and advisees and his possible disillusionment with general education as such.

And students, too, will find that some values are lost in the more limited techniques adapted to mass education. The student-oriented program is especially difficult to maintain under such conditions, and a well-developed personnel program is essential in helping students achieve their aims more fully, as Raushenbush and MacLean point out and as Lloyd-Jones' chapter clearly documents.

A further warning may be sounded because of the fact that little evidence is available to "prove" the superiority of general education over more traditional types, or even to demonstrate that general education is more effectively achieving its own particular goals. There are many competent and experienced staff members in various types of institutions and programs who are honestly skeptical of even the more modest claims which have been made for general education. Proponents of general education who are inclined to advocate it uncritically as a panacea for our educational ills may thereby do the movement a disservice and still further alienate their colleagues.

And finally, there is danger lest general education itself become so diverse and fragmented that it may further splinter the very unity in higher education which it was developed to create. To the reader of this volume the wide diversity in both theory and practice in general-education programs is clearly apparent. It may seem that there is not one, but several, "unities." There is agreement on only the most broadly stated objectives, and this initial agreement is quickly shattered as we move toward pinpointing specific objectives and the best way of having the student achieve them. Because of our diverse culture and college populations, we do not look toward or desire a single plan, for diversity is part of the pattern of a democratic society. However, the gains made so far must be consolidated and expanded. General education must not be allowed to develop into a new kind of specialism. Its educational pattern and its courses must not be allowed to become as rigid and stereotyped in time as those they have replaced.

An optimistic view of the possible resolution of the apparent conflicts in general-education theory and practice has been vigorously expressed by MacLean who says: ³³

³³ Malcolm S. MacLean, "Conflicting Theories in General Education," *The American College*, p. 113. Edited by P. F. Valentine. New York: Philosophical Library, 1949.

It seems reasonable to assume that clear-minded, continuous examination of all these theories and of the experiments and practices flowing out of them will lead in the course of time to their composite blending into a thoroughly eclectic and effective theory and practice flexible enough to provide for all ages and for most levels of human ability and for multiform societies.

The most hopeful aspect of the apparent chaos of divergent ideas and procedures, however, is that there is in reality a single dominant unity underlying all concepts and practices in general education, and that unity is the one most significant in a democratic society. "Men of goodwill," as McConnell observes, "men with a strong sense of moral and spiritual values, men with unswerving democratic loyalties may be counted on to share the same purposes to a very great degree. But this is the kind of commonality that leaves room for wide differences in point of view, that attains unity not in spite of but through diversity, that assures freedom of discussion, criticism, dissent, and positive affirmations in deciding upon ends and in selecting or devising means" (pp. 9-10).

The dominant unity is, therefore, that of *purpose* — a dedication to educate young men and women to understand, uphold, and improve the freedom which is their heritage and which, however diverse and varied the educational patterns of attaining such freedom may be, yet properly imbues them with the zeal to become informed, intelligently critical, and active citizens in a free society.

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